

Pump Performance Datasheet

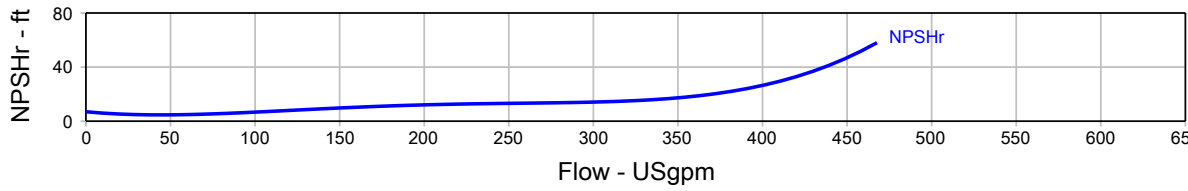
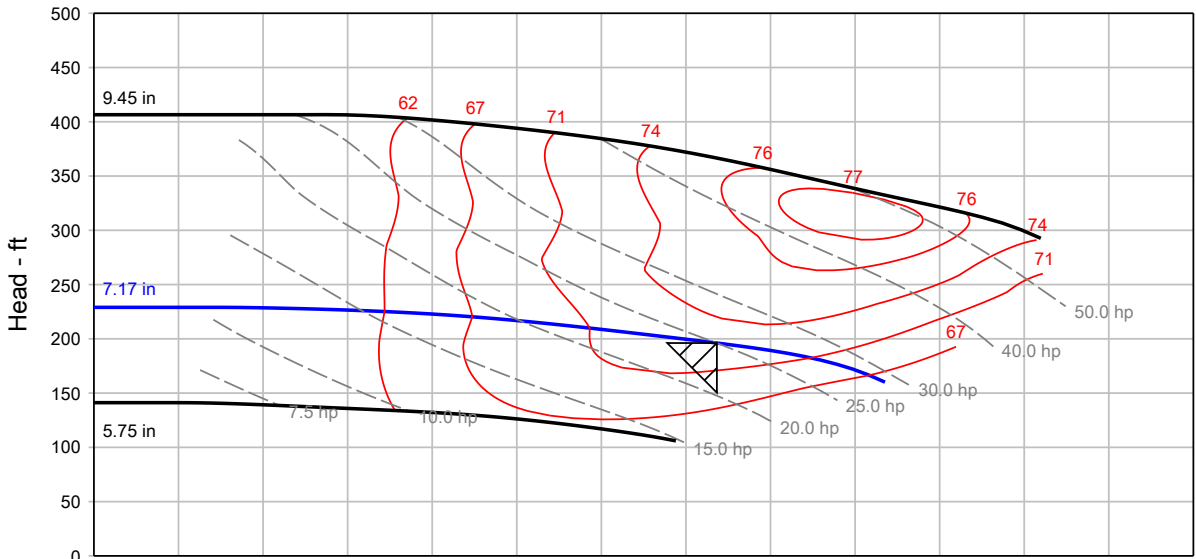
Customer :	Quote Number / ID :	596697
Customer ref. / PO :	Model :	NBS 020-095-2P
Tag Number : 001	Stages :	1
Service :	Based on curve number :	020-095-2P_Std
Quantity : 1	Basic model number :	-
	Date last saved :	05/31/2022 2:22 PM

Operating Conditions		Liquid	
Flow, rated	: 368.3 USgpm	Liquid type	: Cold Water
Differential head / pressure, rated (requested)	: 196.1 ft	Additional liquid description	:
Differential head / pressure, rated (actual)	: 196.1 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	: 7.17 in		
Impeller diameter, maximum	: 9.45 in		
Impeller diameter, minimum	: 5.75 in		
Efficiency	: 72.91 %		

Performance		Pressure Data	
NPSH required / margin required	: 19.67 / 0.00 ft	Maximum working pressure	: 99.10 psi.g
nq (imp. eye flow) / S (imp. eye flow)	: 19 / 132 Metric units	Maximum allowable working pressure	: 175.0 psi.g
MCSF	: 34.18 USgpm	Maximum allowable suction pressure	: 130.0 psi.g
Head, maximum, rated diameter	: 229.0 ft	Hydrostatic test pressure	: 263.0 psi.g
Head rise to shutoff	: 16.76 %		
Flow, best eff. point	: 368.3 USgpm		
Flow ratio, rated / BEP	: 100.00 %		
Diameter ratio (rated / max)	: 75.87 %		
Head ratio (rated dia / max dia)	: 53.50 %		
Cq/Ch/Ce/Cn [ANSI/HI 9.6.7-2010]	: 1.00 / 1.00 / 1.00 / 1.00		
Selection status	: Acceptable		

Energy Indexes		Driver & Power Data (@Max density)	
PEI (CL)	: 0.89	Motor sizing specification	: Max power (non-overloading)
ER (CL)	: 11	Margin over specification	: 0.00 %
		Service factor	: 1.15 (used)
		Power, hydraulic	: 18.23 hp
		Rated power (based on duty point)	: 25.01 hp
		Max power (non-overloading)	: 28.91 hp
		Nameplate motor rating	: 30.00 hp / 22.37 kW



Construction Datasheet

Project name	Default	Tag Number	001
Consulting engineer		Service	
Customer		Model	NBS 020-095-2P
Customer ref. / PO		Quantity	1
Quote Number / ID	596697	Quoted By (Sales Office)	PFC EQUIPMENT INC
Date last saved	05/31/2022 2:22 PM	Quoted By (Sales Engineer)	Kelly Kresa

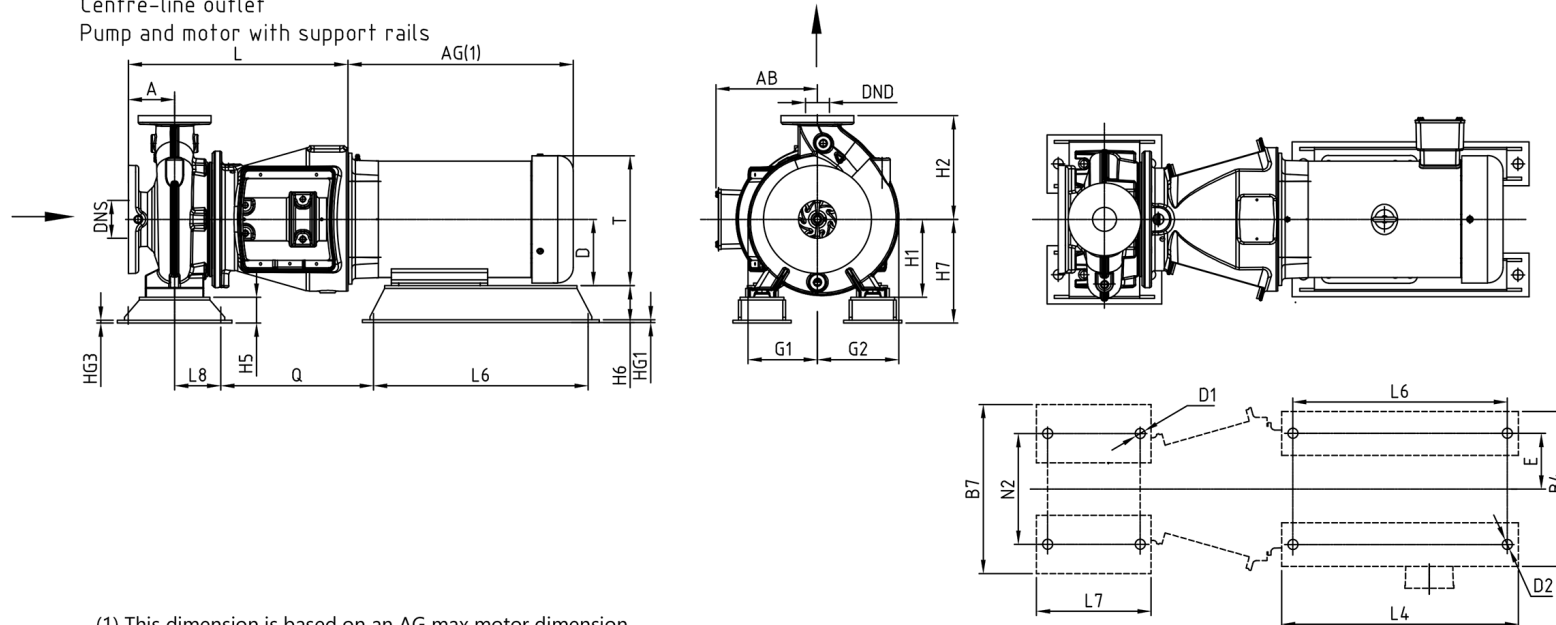
Construction Code : NBS 020-095/7.17AASG6S2ESBQQEQX2

Construction		Motor Information	
Product Family	NBS_Std	Manufacturer	Baldor
Suction Size	2.5 in.	Frame Size	286TSC
Discharge Size	2 in.	Power	30 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	221.0 lb
Impeller Nut	Stainless Steel, AISI-304	Support Rail	49.00 lb
Shaft	Stainless Steel, AISI 420	Base Plate	-
Cover	Ductile Cast Iron, ASTM 70-50-05	Driver	389.0 lb
Seal Type	Rubber bellows seal	Estimated Shipping Gross Weight	659.0 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 020-095-2P
Customer ref. / PO	:	Quantity of pumps	: 1
Quote Number / ID	: 596697	Quoted By (Sales Office)	: PFC EQUIPMENT INC
Date last saved	: 05/31/2022 2:22 PM	Quoted By (Sales Engineer)	: Kelly Kresa

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



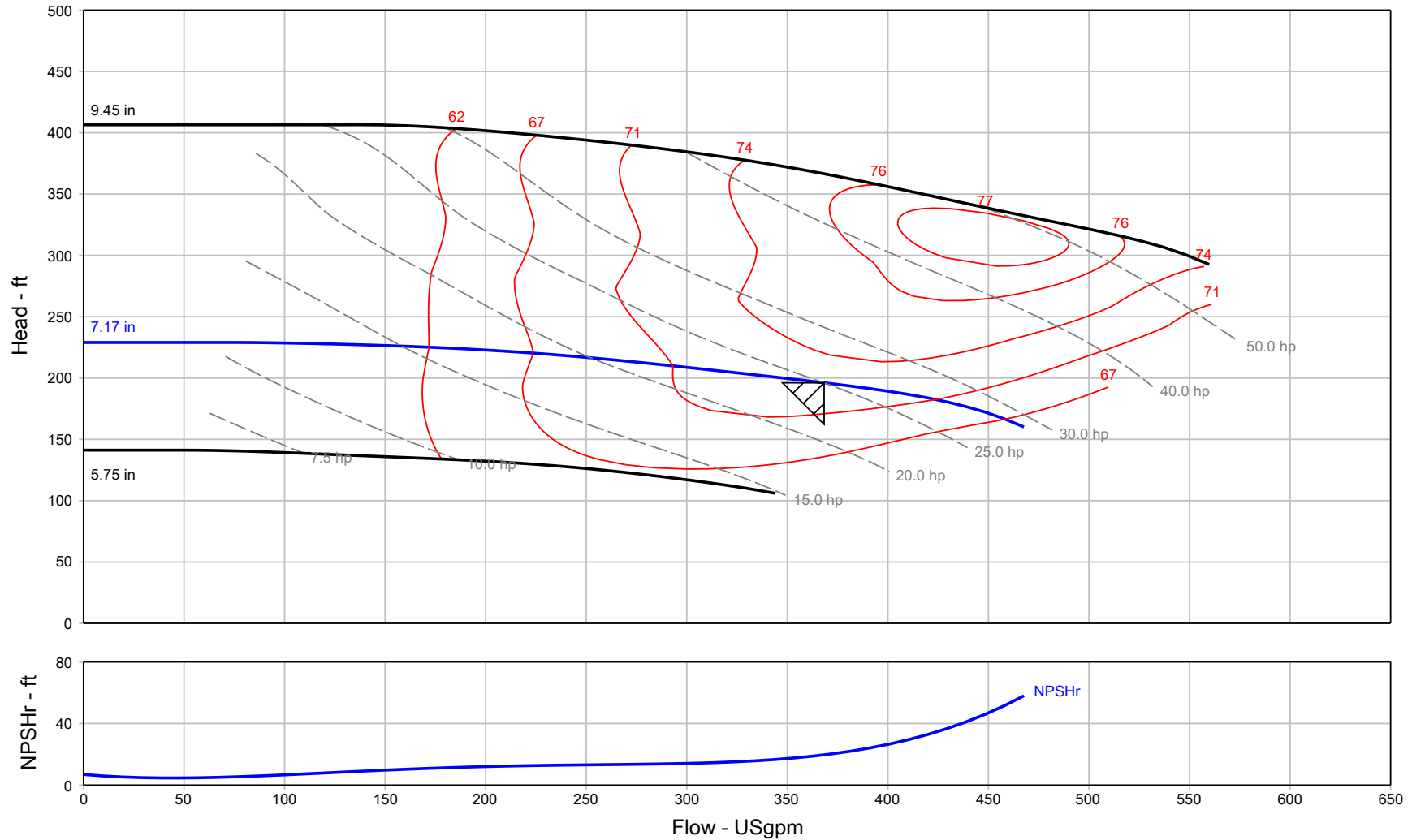
(1) This dimension is based on an AG max motor dimension

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	286TSC	2.5	2	125	4.00	13.13	23.56	13.95	12.80	7.00	0.69	0.69	5.50	5.91	6.48	7.00	9.00	1.00	1.00	8.00	0.50	0.50	15.85	22.25	20.75	8.75	3.63	9.84	10.58	14.63	659.0

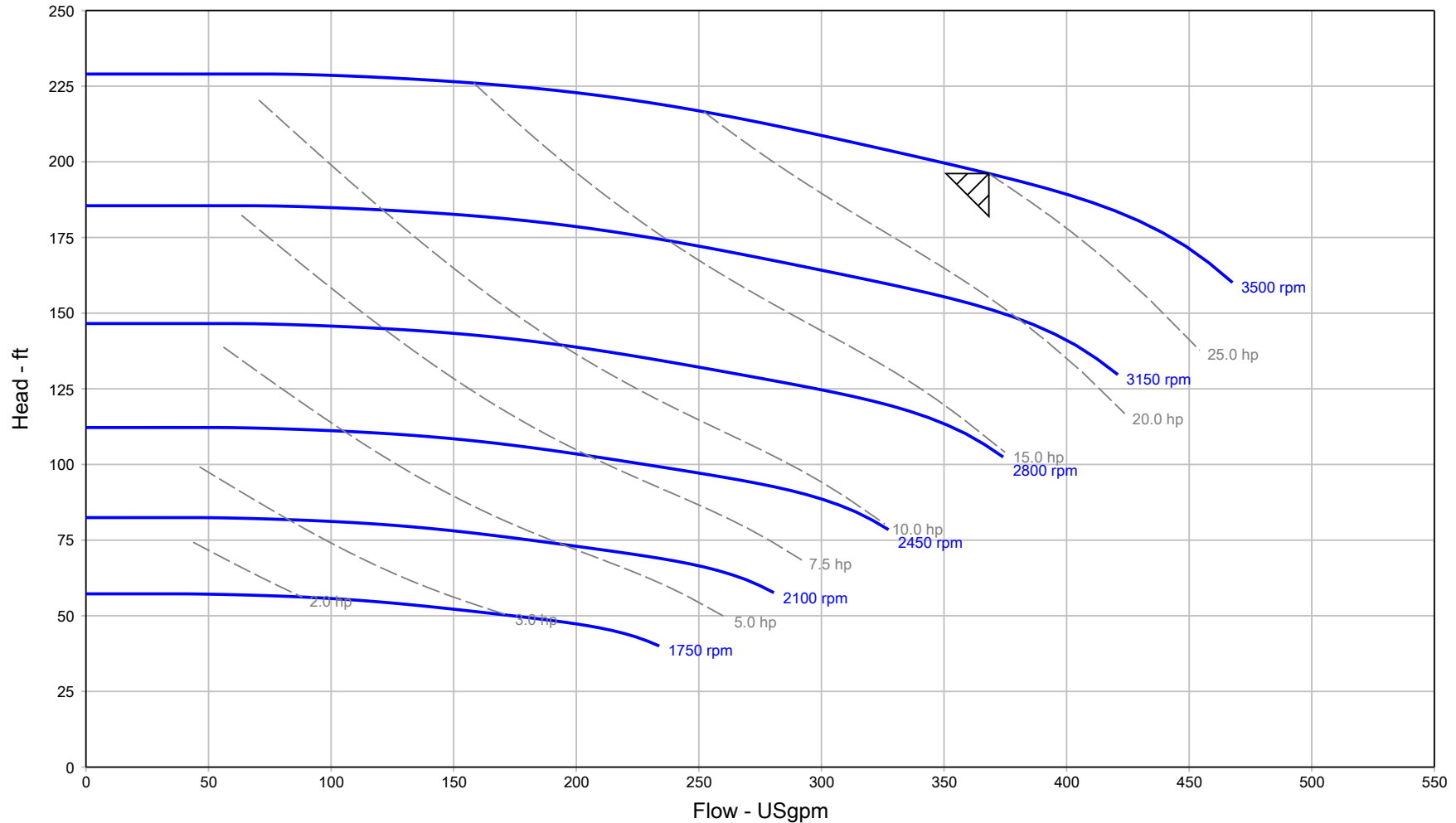
Conditions of Service				Motor Data			
Flow: 368.3 USgpm	Fluid: Cold Water	HP: 30	Encl: TEFC	Phase: 3	Efficiency: Premium		
TDH: 196.1 ft	Temp.: 68.00 deg F	RPM: 3500 rpm	Hz: 60	Voltage: 230/460	S.F.: 1.15		

Pump Performance Curve



Project name	: Default	Tag Number	: 001	Flow, rated	: 368.3 USgpm
Consulting engineer	:	Service	:	Differential head / pressure, rated	: 196.1 ft
Customer	:	Model	: NBS 020-095-2P	Rated power (based on duty point)	: 25.01 hp
Customer ref. / PO	:	Quantity	: 1	Max power (non-overloading)	: 28.91 hp
Quote Number / ID	: 596697	Quoted By (Sales Office)	: PFC EQUIPMENT INC	Efficiency	: 72.91 %
Date last saved	: 05/31/2022 2:22 PM	Quoted By (Sales Engineer)	: Kelly Kresa	Impeller diameter, rated	: 7.17 in
Based on curve number	: 020-095-2P_Std	Stages	: 1	PEI (CL)	: 0.89
		Speed, rated	: 3500 rpm	ER (CL)	: 11

Multi-Speed Performance Curve



Project name	: Default	Tag Number	: 001	Speed, rated	: 3500 rpm
Consulting engineer	:	Service	:	Flow, rated	: 368.3 USgpm
Customer	:	Model	: NBS 020-095-2P	Differential head / pressure, rated	: 196.1 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 2:22 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	: 020-095-2P_Std