

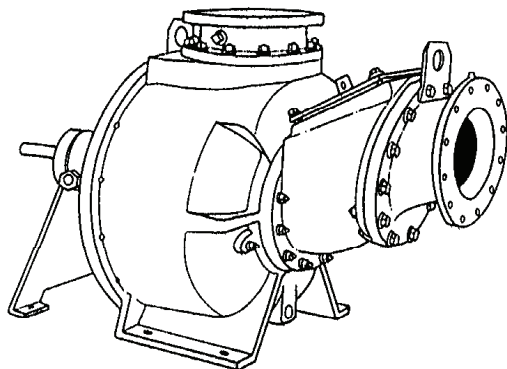
# Model: PO10LA

3" Spherical Solids Handling  
Universal Drive



## Self-Priming, Solids Handling Pumps

### Specifications:



<b>SUCTION/DISCHARGE</b>	..... 10" (254mm) x 10" (254mm) 125 lb. Flange
<b>LIQUID TEMPERATURE</b>	..... 160°F (71°C) Continuous
<b>VOLUTE/WEARPLATE</b>	..... Cast Iron ASTM A-48, Class 30 Replaceable External Clearance Adjustment
<b>CASE</b>	..... Cast Iron ASTM A-48, Class 30
<b>END COVER</b>	..... Cast Iron ASTM A-48, Class 30 Full Diameter, Removable
<b>SEAL PLATE</b>	..... Alloy Steel, Replaceable
<b>PEDESTAL</b>	..... Cast Iron ASTM A-48, Class 30
<b>IMPELLER: Design</b>	..... Two Vane, Open. Dynamically Balanced, ISO G6.3
<b>Material</b>	..... Ductile Iron ASTM A-395
<b>SHAFT</b>	..... High Carbon Steel
<b>SHAFT SLEEVE</b>	..... 316 Stainless Steel
<b>SQUARE RINGS</b>	..... Buna-N
<b>HARDWARE</b>	..... Corrosion Resistant Steel
<b>PAINT</b>	..... Air Dry Enamel.
<b>SEAL:</b>	
<b>Design</b>	..... Double Mechanical
<b>Lubrication</b>	..... Oil, with Pressure Compensating Lubricator
<b>Material</b>	..... Rotating Faces - Carbon Stationary Faces - Ceramic Elastomer - Buna-N Hardware - 300 Series Stainless
<b>BEARING - PUMP END:</b>	
<b>Design</b>	..... Single Row, Ball, Oil Lubricated
<b>Load</b>	..... Radial & Thrust
<b>BEARING - DRIVE END:</b>	
<b>Design</b>	..... Single Row, Ball, Oil Lubricated
<b>Load</b>	..... Radial & Thrust
<b>CHECK VALVE:</b>	
<b>Material</b>	..... Elbow - Cast Iron ASTM A-48, Class 30 Valve Flap - Neoprene Weight - Cast Iron ASTM A-48, Class 30

**OPTIONAL EQUIPMENT**..... Seal Materials, Case Heater, Stainless Hardware; High Temperature Control; Flex Coupled Assy. with Base & OSHA Guard; Right Hand V-Belt Drive Assy. and Left Hand V-Belt Drive Assy., In-Line Vertical V-Belt Drive Assy., with Unit Base, Motor Adjusting Base & OSHA Guard

**Model: PO10LA-16X  
PO10LA-14X**

Sample Specifications: Section 4 Page 9-10.

### DESCRIPTION:

SELF-PRIMING CENTRIFUGAL SOLIDS HANDLING PUMPS DESIGNED FOR MUNICIPAL AND INDUSTRIAL APPLICATIONS.



**WARNING:**  
CANCER AND REPRODUCTIVE HARM -  
WWW.P65WARNINGS.CA.GOV

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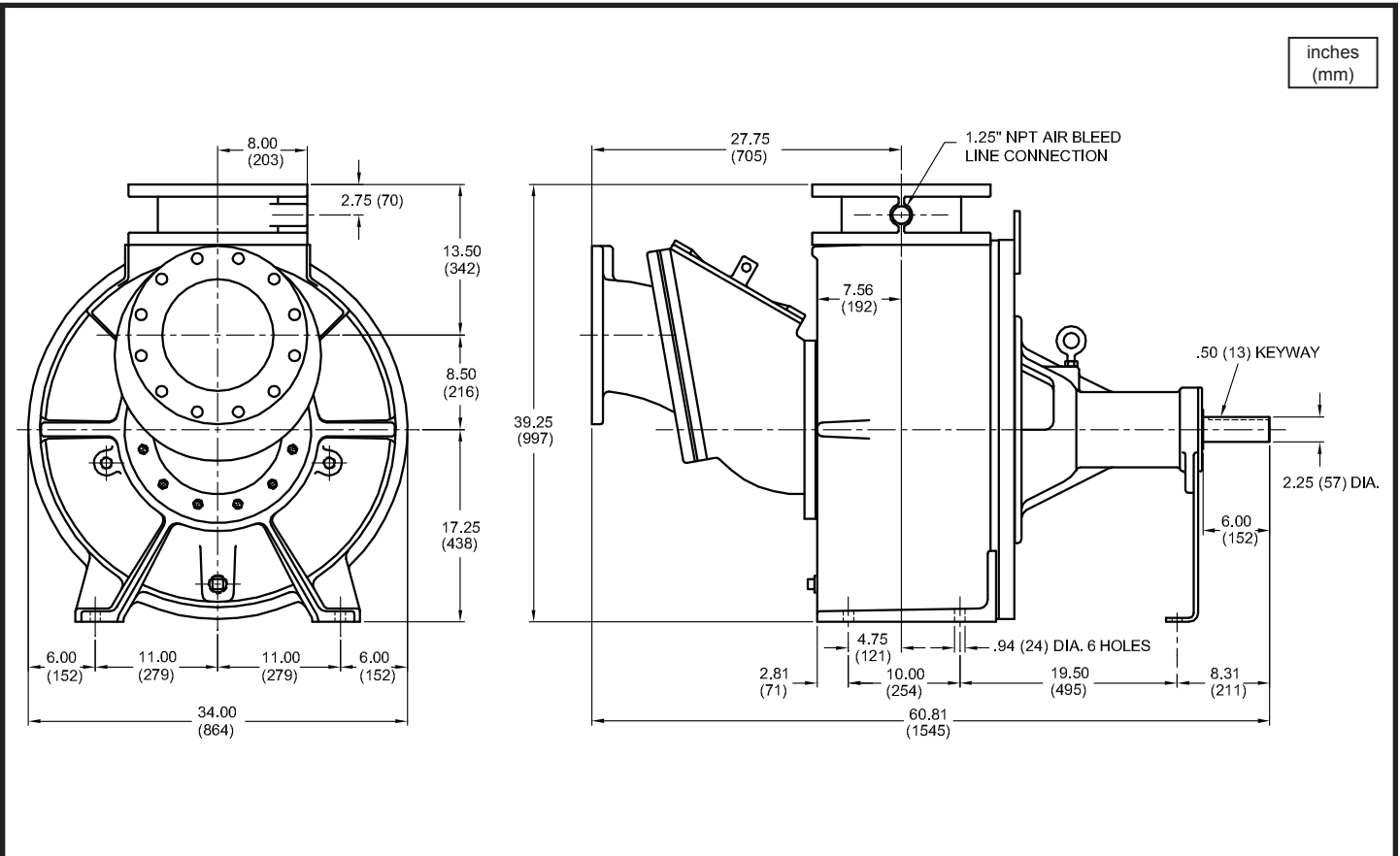


A Crane Co. Company

**PUMPS & SYSTEMS**

USA: (937) 778-8947 • Canada: (905) 457-6223 • International: (937) 615-3598

**Self-Priming, Solids Handling Pumps**



MODEL NO	PART NO	WEIGHT LBS. (kg)	
PO10LA-16X	AC0AD-0016X-031	1800 (817)	
PO10LA-14X	AC0AD-0014X-031	1800 (817)	

**IMPORTANT !**

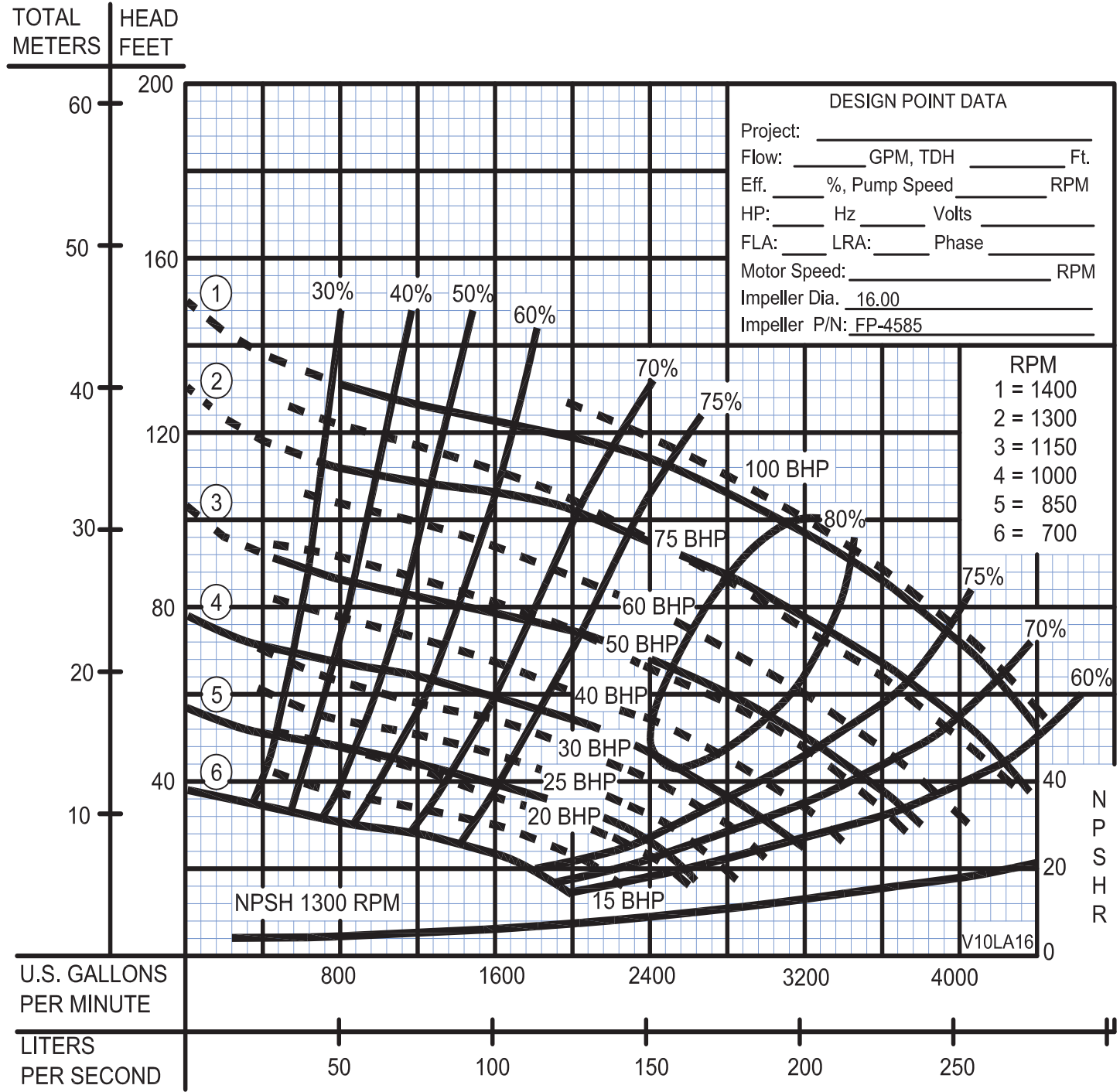
- DO NOT USE FOR PUMPING FLUIDS WITH A FLASH POINT OF LESS THAN 100°F.
- MAKE CERTAIN THAT PUMP AND/OR MOTOR ASSEMBLY AND CONTROLS HAVE THE APPROPRIATE RATINGS FOR THE GIVEN APPLICATION AREA CLASSIFICATION. (ie DIVISION I, AGENCY LISTING ETC.)

# Model: PO10LA-16X

Performance Curve  
Various RPM



## Self-Priming Solids Handling Pumps



MAXIMUM DRY PRIMING LIFT			
PUMP SPEED	2 Min	4 Min	6 Min
700 RPM	7 Ft.	13 Ft.	15 Ft.
800 RPM	10 Ft.	17 Ft.	20 Ft.
1000 RPM	15 Ft.	20 Ft.	20 Ft.
1150 RPM	20 Ft.	20 Ft.	20 Ft.
1300 RPM	20 Ft.	20 Ft.	20 Ft.
1400 RPM	20 Ft.	20 Ft.	20 Ft.

When pump is operating, the **SUCTION LIFT** is limited by the available **NPSH** which is the corrected atmospheric pressure minus the dynamic suction lift, vapor pressure loss and 2 foot safety factor. This **net available NPSH** must exceed the **required NPSH** of the pump or a reduction of capacity, loss of efficiency, noise, vibration and cavitation will result. Calculate the dynamic suction lift from the **low** liquid level to the centerline of the impeller. When pump is priming, it is limited by the dry **PRIMING LIFT** which is the vertical distance from the **high** liquid level to the centerline of the impeller.

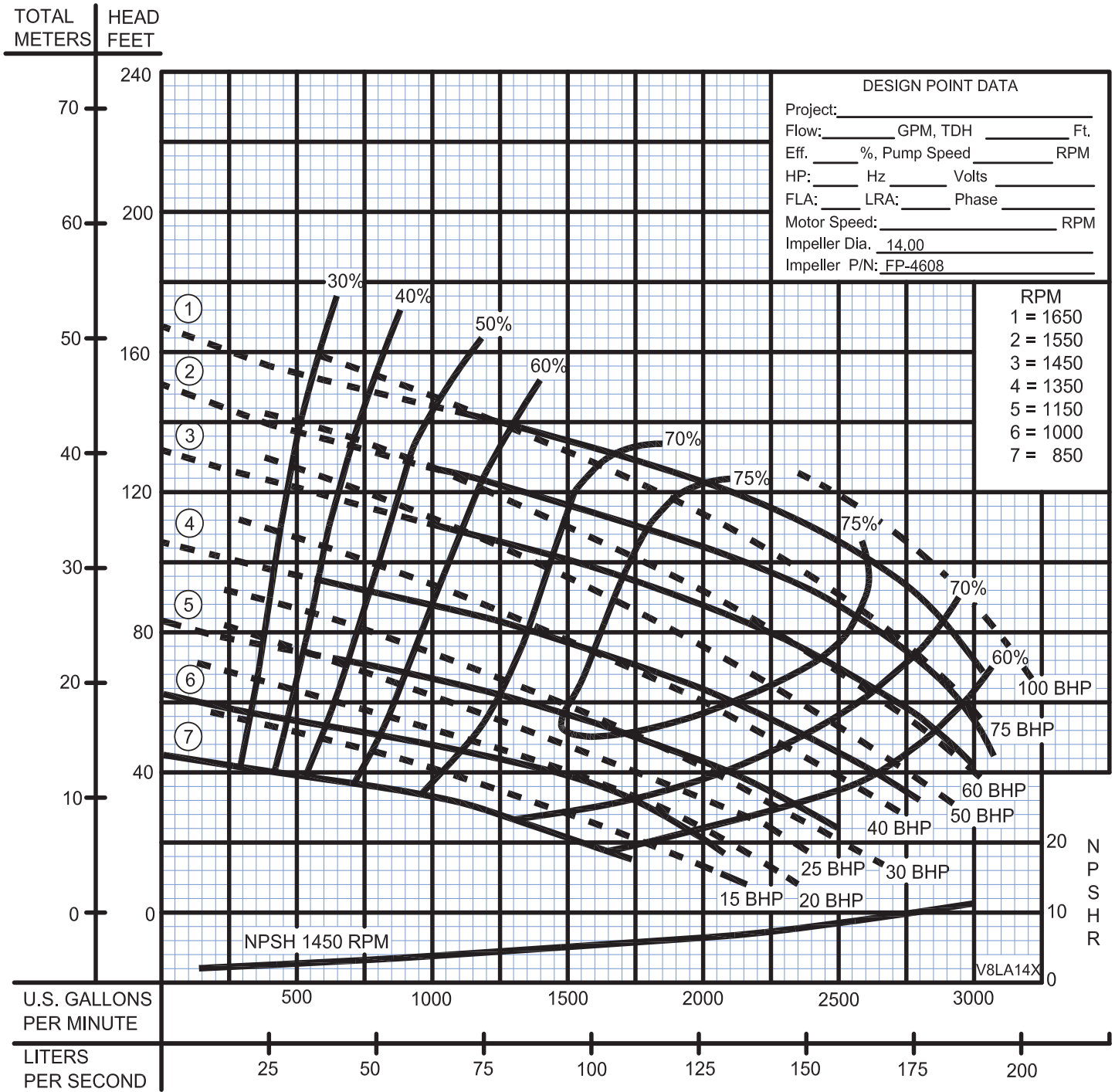
DO NOT Operate in "DASHED" Area of HQ Curve. Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

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## PUMPS & SYSTEMS

## Self-Priming Solids Handling Pumps



MAXIMUM DRY PRIMING LIFT			
PUMP SPEED	2 Min	4 Min	6 Min
700 RPM	5 Ft.	7 Ft.	9 Ft.
850 RPM	6 Ft.	9 Ft.	12 Ft.
1000 RPM	10 Ft.	15 Ft.	17 Ft.
1150 RPM	17 Ft.	20 Ft.	20 Ft.
1300 RPM	20 Ft.	20 Ft.	20 Ft.
1450 RPM	20 Ft.	20 Ft.	20 Ft.
1550 RPM	20 Ft.	20 Ft.	20 Ft.
1650 RPM	20 Ft.	20 Ft.	20 Ft.

When pump is operating, the **SUCTION LIFT** is limited by the available **NPSH** which is the corrected atmospheric pressure minus the dynamic suction lift, vapor pressure loss and 2 foot safety factor. This **net available NPSH** must exceed the **required NPSH** of the pump or a reduction of capacity, loss of efficiency, noise, vibration and cavitation will result. Calculate the dynamic suction lift from the **low** liquid level to the centerline of the impeller. When pump is priming, it is limited by the dry **PRIMING LIFT** which is the vertical distance from the **high** liquid level to the centerline of the impeller.

DO NOT Operate in "DASHED" Area of HQ Curve. Testing is performed with water, specific gravity 1.0 @ 68° F @ (20°C), other fluids may vary performance

# Model: PO8LA / PO10LA

Horizontal V-Belt Base, Motor Speed: 1750 RPM  
 V-Belt Drive, Sheaves & Bushings, Pump Shaft: 2.25 Dia.



## Self-Priming Solids Handling Pumps

Driven Speed	Speed Ratio	Motor HP	Frame Size	Center Distance	Drive P/N		Driven Speed	Speed Ratio	Motor HP	Frame Size	Center Distance	Drive P/N
1855	1.06	100	404-405T	36.9	091160		1260	1.39	100	404-405T	36.1	091207
1855	1.06	75	365T	36.9	091161		1260	1.39	75	365T	36.1	091208
							1260	1.39	60	364T	37.0	091209
1820	1.03	100	404-405T	35.6	091162		1260	1.39	50	326T	37.0	091210
1820	1.03	75	365T	35.6	091163		1260	1.39	40	324T	37.0	091210
							1260	1.39	30	286T	37.0	091211
							1260	1.39	25	284T	37.0	091211
1700	1.03	100	404-405T	35.7	091166		1190	1.47	75	365T	35.5	091212
1700	1.03	75	365T	35.7	091167		1190	1.47	60	364T	35.5	091212
1700	1.03	60	364T	35.7	091168		1190	1.47	50	326T	35.5	091213
							1190	1.47	40	324T	35.3	091213
							1190	1.47	30	286T	35.3	091214
1650	1.06	100	404-405T	36.9	091169		1200	1.45	25	284T	35.3	091215
1650	1.06	75	365T	36.9	091170							
1650	1.06	60	364T	36.4	091171		1160	1.51	60	364T	35.4	091216
1650	1.06	50	326T	37.3	091172		1160	1.51	50	326T	35.4	091217
							1160	1.51	40	324T	35.4	091218
1590	1.10	100	404-405T	36.1	091173		1160	1.51	30	286T	34.5	091219
1590	1.10	75	365T	36.1	091174		1160	1.51	25	284T	34.5	091220
1590	1.10	60	364T	36.1	091175		1160	1.51	20	256T	34.5	091221
1590	1.10	50	326T	36.1	091176							
							1105	1.58	50	326T	37.8	091222
1560	1.12	100	404-405T	36.4	091177		1105	1.58	40	324T	37.8	091223
1560	1.12	75	365T	36.4	091178		1105	1.58	30	286T	37.8	091224
1560	1.12	60	364T	36.8	091179		1105	1.58	25	284T	37.8	091225
1560	1.12	50	326T	36.8	091180		1105	1.58	20	256T	37.8	091226
1560	1.12	40	324T	36.8	091181							
							1050	1.66	50	326T	36.3	091227
1500	1.17	100	404-405T	36.8	091182		1050	1.66	40	324T	36.3	091228
1500	1.17	75	365T	36.8	091183							
1500	1.17	60	364T	36.8	091183		1060	1.64	30	286T	36.5	091229
1500	1.17	50	326T	36.5	091184		1060	1.64	25	284T	36.5	091230
1500	1.17	40	324T	36.5	091185		1060	1.64	15/20	254-256T	36.5	091231
1445	1.21	100	404-405T	36.1	091186		1000	1.75	40	324T	35.6	091232
1445	1.21	75	365T	36.1	091187		1000	1.75	30	286T	35.6	091233
1445	1.21	60	364T	36.1	091188		1000	1.75	25	284T	35.6	091234
1445	1.21	50	326T	37.4	091189		1000	1.75	20	256T	35.6	091235
1445	1.21	40	324T	36.1	091190		1000	1.75	15	254T	35.6	091236
1390	1.26	100	404-405T	37.0	091191		930	1.88	40	324T	36.0	091237
1390	1.26	75	365T	37.0	091192		920	1.90	30	286T	37.2	091238
1390	1.26	60	364T	37.0	091193		920	1.90	25	284T	37.2	091238
1390	1.26	50	326T	37.0	091194		920	1.90	20	256T	37.2	091239
1390	1.26	40	324T	37.0	091194		920	1.90	15	254T	37.2	091240
1355	1.28	100	404-405T	36.4	091195		870	2.01	25	284T	37.4	091242
1355	1.28	75	365T	36.4	091196		870	2.01	20	256T	37.4	091243
							870	2.01	15	254T	37.4	091244
1345	1.30	60	364T	36.4	091197							
1345	1.30	50	326T	36.4	091198		780	2.24	20	256T	35.3	091246
1345	1.30	40	324T	36.4	091199		780	2.24	15	254T	35.3	091247
1345	1.30	30	286T	37.9	091200							
							750	2.34	20	256T	37.1	091249
1290	1.35	100	404-405T	37.9	091201		750	2.34	15	254T	37.1	091250
1290	1.35	75	365T	37.9	091202							
1290	1.35	60	364T	37.9	091203		700	2.50	15	254T	37.4	091252
1290	1.35	50	326T	37.9	091204							
1290	1.35	40	324T	37.9	091205							
1310	1.33	30	286T	35.4	091206							