



**HORMA PUMPS  
(PTY) LTD**

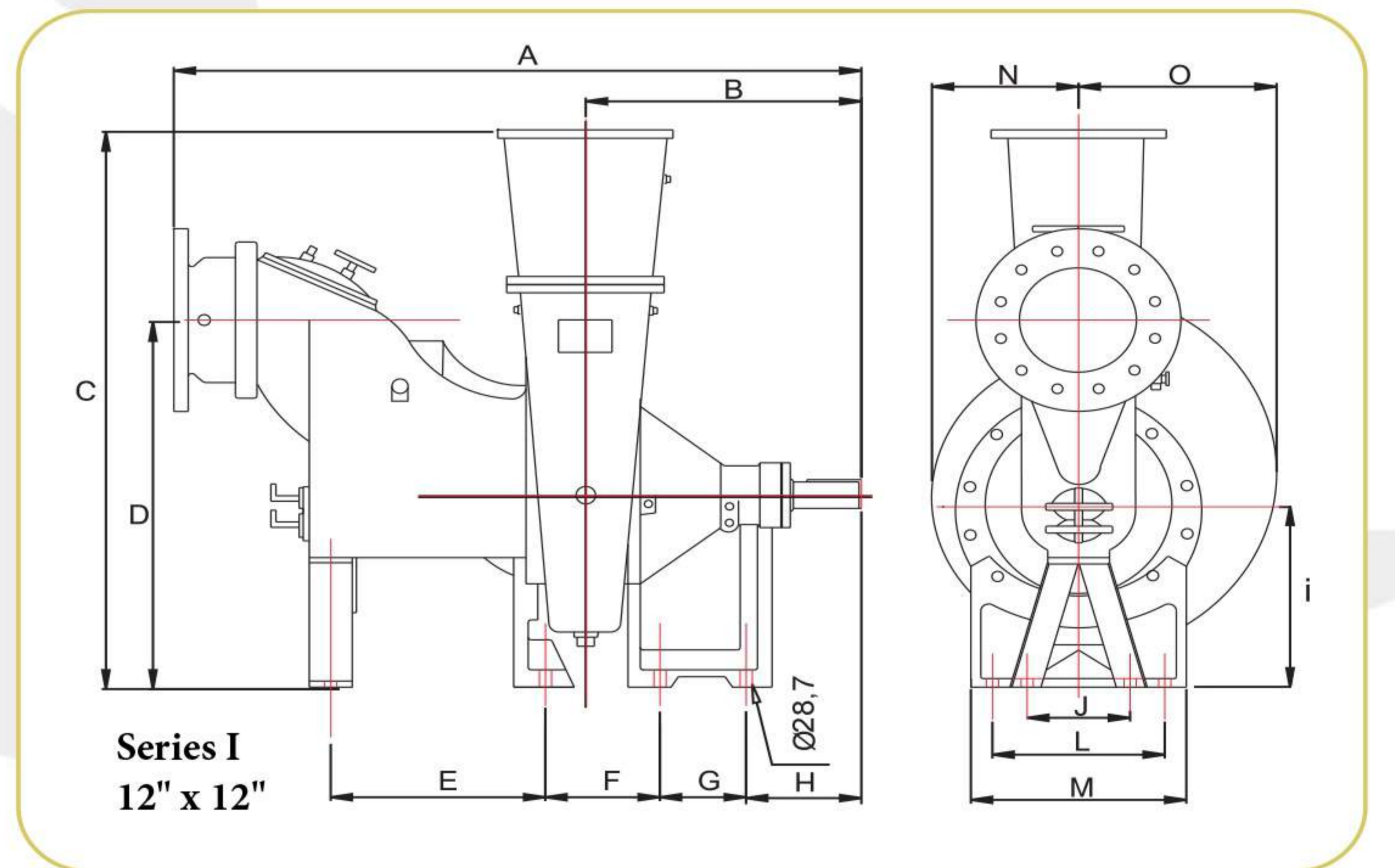
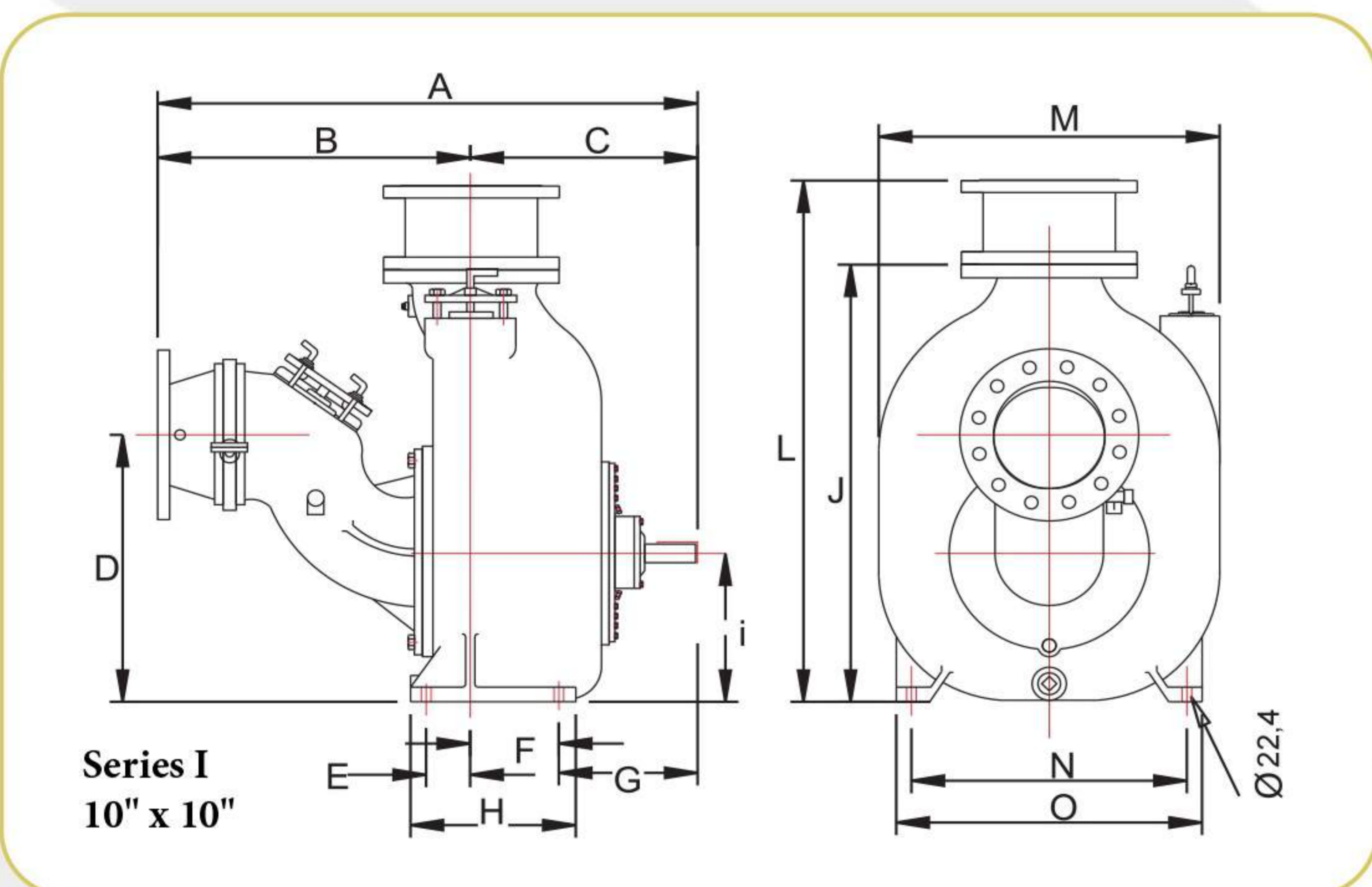
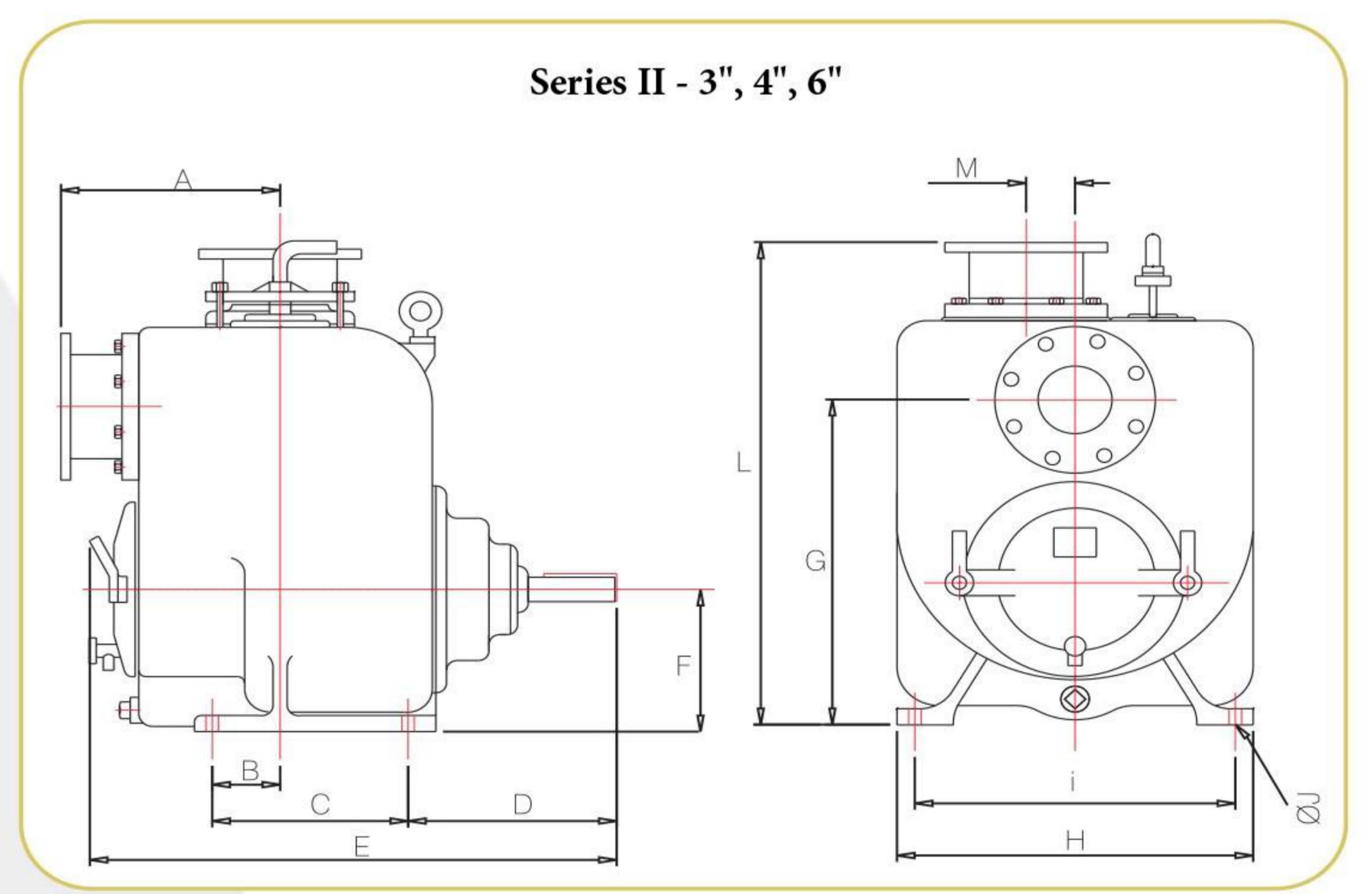
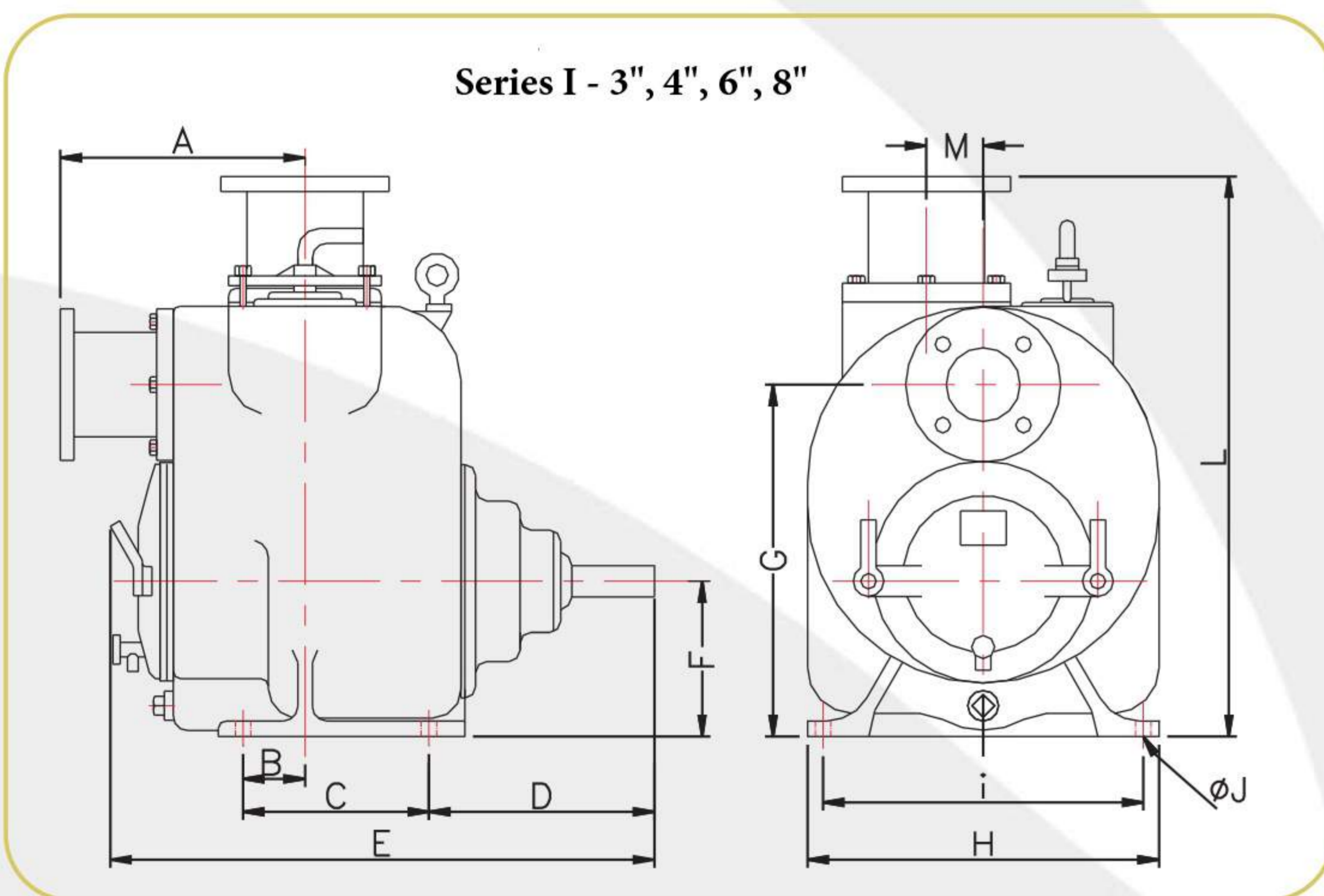
**Pump Reconditioning and  
General Engineering**

# **SELF PRIMER**



# MATERIALS OF CONSTRUCTION

	Standard CI	Type A CI/A216	Type B CI/CD4	Type C CI/304SS	Type D CI/ADI	Type E CD4MCU	Type F 316SS	Type F1 304SS	Type G ADI	Type H Hastelloy C276
Casing	A48 CL30					CD4MCU	316SS	304SS	ADI	C276
Impeller	A60 4018	A216	CD4MCU	304SS	ADI	CD4MCU	316SS	304SS	ADI	C276
Wear Plate	SAE 1020	A216	CD4MCU	304SS	ADI	CD4MCU	316SS	304SS	ADI	C276
Cover Plate	A48 CL30	A216	CD4MCU	304SS	ADI	CD4MCU	316SS	304SS	ADI	C276
Bearing Housing	A48 CL30					CD4MCU	316SS	304SS	ADI	C276
Seal Plate	A48 CL30	A216	CD4MCU	304SS	ADI	CD4MCU	316SS	304SS	ADI	C276
Flap Valve	Neoprene					Viton				
Shaft Sleeve	316SS									
Flange	A48 CL30					CD4MCU	316SS	304SS	ADI	C276
O'Rings	Buna			Viton						
Shaft	ANSI 4140			17-4 ss			17-4 ss		17-4 ss	
Mechanical Seal	Casing in 316SS, O'Rings in Viton, Faces in Titanium and Tungsten carbide									

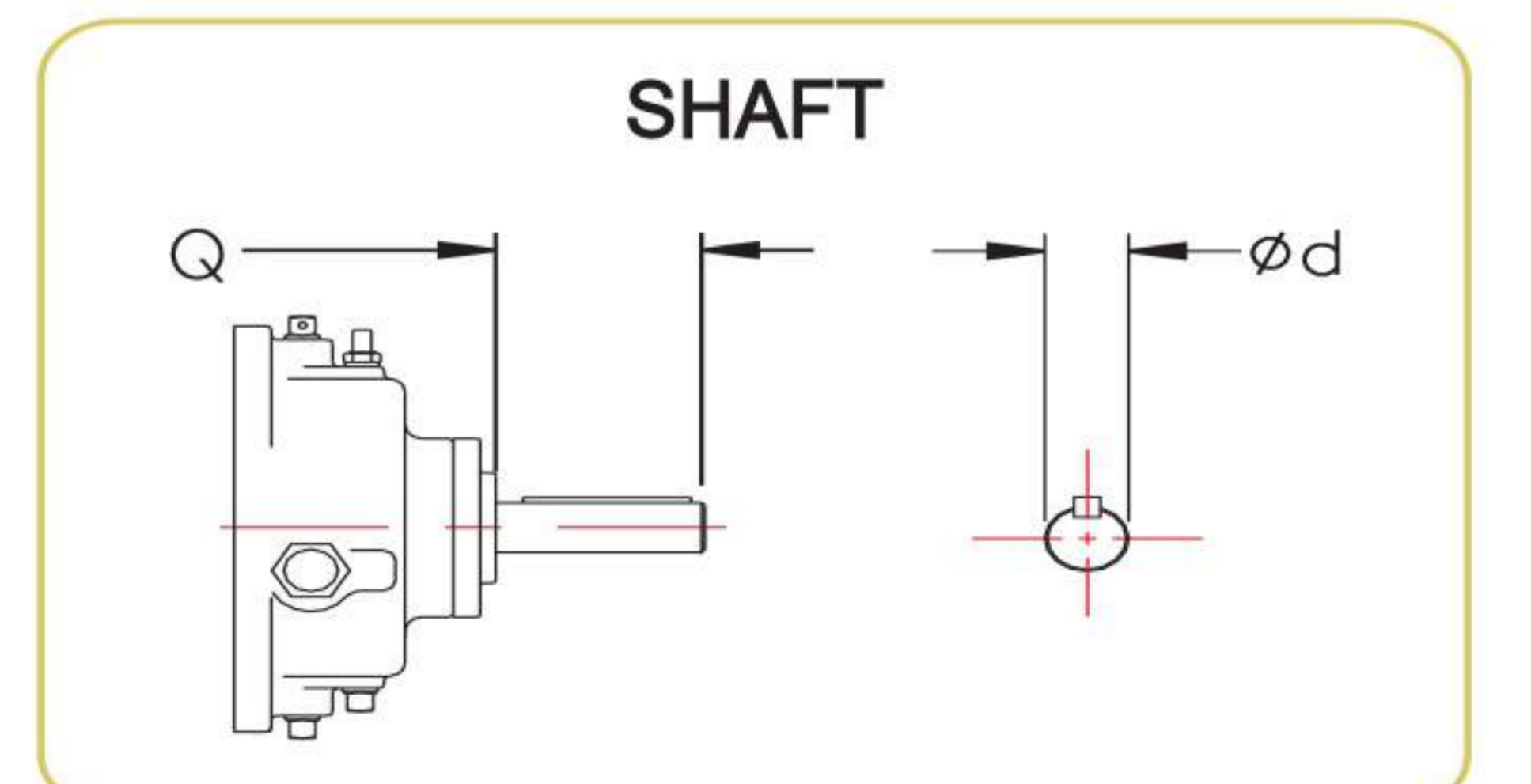


**Series I**

**Series II**

	2"	3"	4"	6"	8"	10"	12"
A	235.0	293.7	317.5	406.4	412.8	1237.2	1621.5
B	54.0	76.2	77.8	77.8	101.6	712.0	650.0
C	163.2	228.6	280.0	279.4	304.8	525.3	1474.7
D	275.0	284.2	293.7	293.7	407.1	636.5	971.5
E	547.0	668.3	768.4	801.7	1023.1	101.6	508.0
F	151.5	190.5	222.2	257.2	330.2	204.3	270.0
G	318.0	431.8	495.4	568.3	723.9	320.8	203.2
H	308.3	431.8	501.7	577.9	704.9	381.0	272.5
i	281.0	393.7	457.2	527.0	635.0	355.6	508.0
J	14.0	17.5	17.5	17.5	22.4	1041.4	242.6
d	38.1	38.1	38.1	38.1	44.5	44.5	69.9
L	523.0	687.4	743.0	896.9	1068.3	1220.7	406.4
M	70.0	70.0	70.0	70.0		785.9	508.0
N						635	345.9
O						704.9	466.9
Q	101.6	101.6	127.0	127.0	169.9	122.2	167.4

	3"	4"	6"
A	292.1	317.5	406.4
B	76.2	96.8	77.7
C	228.6	279.4	279.4
D	282.9	297.5	330.7
E	666.8	751.6	844.6
F	190.5	222.2	257.0
G	431.8	508.0	568.4
H	431.8	508.0	584.2
i	394.0	457.2	527.2
J	17.5	17.5	17.5
d	38.1	38.1	44.5
L	686.8	749.3	897.1
M	69.8	69.8	69.8
N			
O			
Q	103.1	126.2	114.3



**MAINTENANCE DISTANCE**

Required in front of pump ( to remove cover ) and behind of pump ( to remove rotating assembly )  
 Series I 2" - 6", 10", 12", Series II 3" - 6" : 460mm  
 Series I 8" : 610mm

**FLANGES**

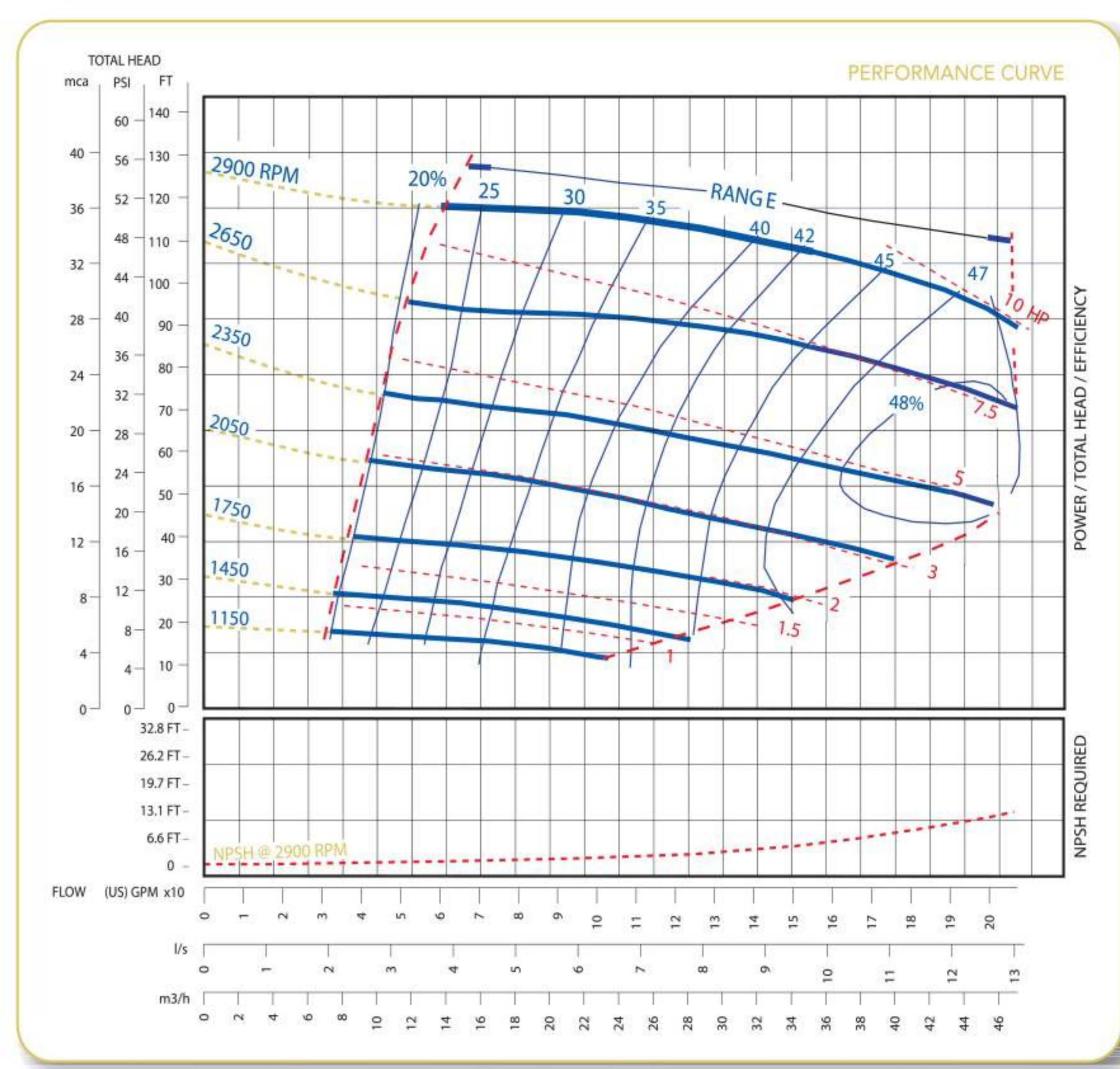
according to -  
 Model number : Nominal bore, inch  
 Drilled to : BS4504 Table 16

# SERIES I

## Self Priming Curves

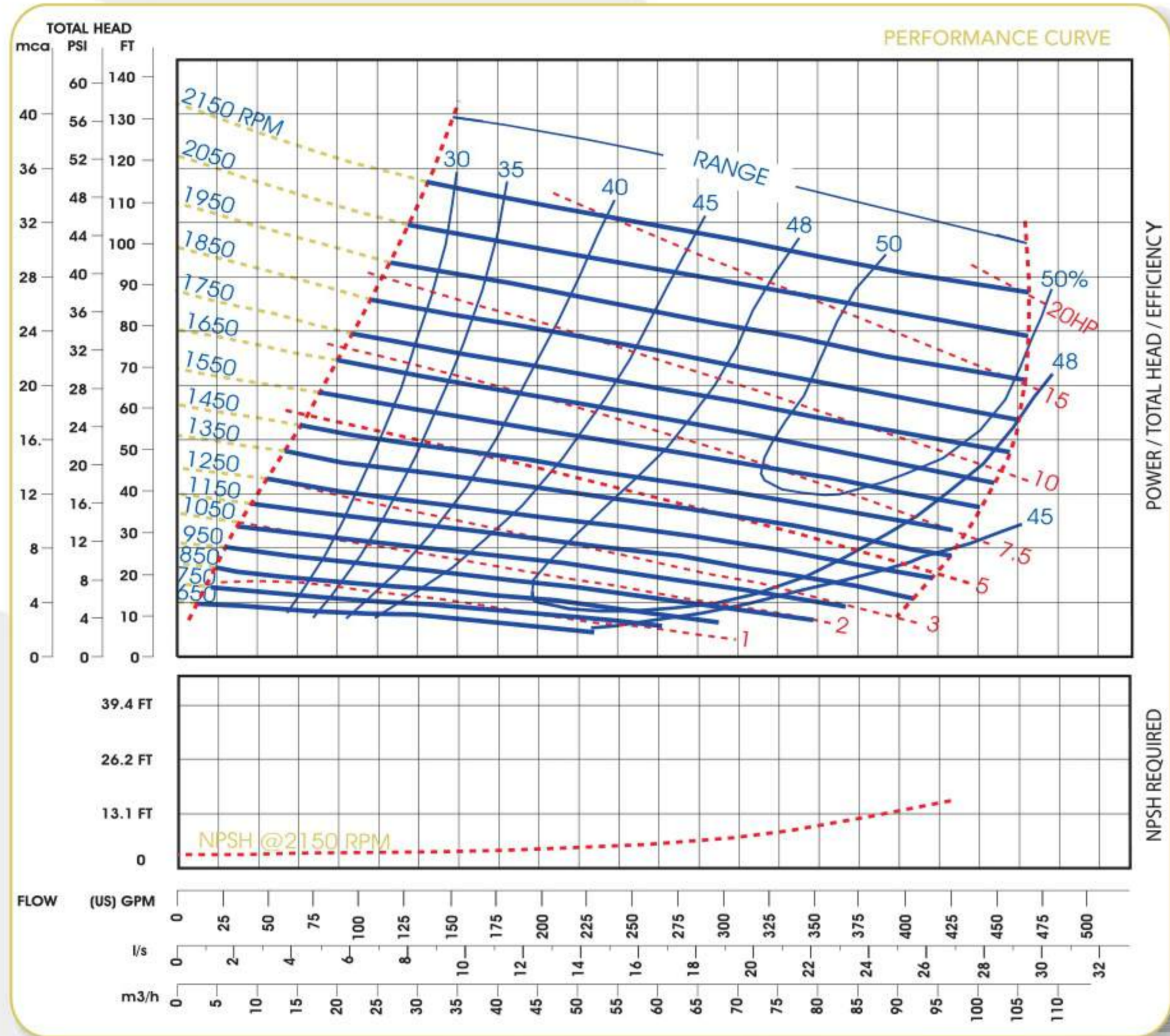
**2" x 2"**

Net Weight  
**92 kg**  
Shipping Weight  
**114 kg**  
Impeller Diameter  
**159 mm**  
Max Solids  
Dia.  
**44.45 mm**



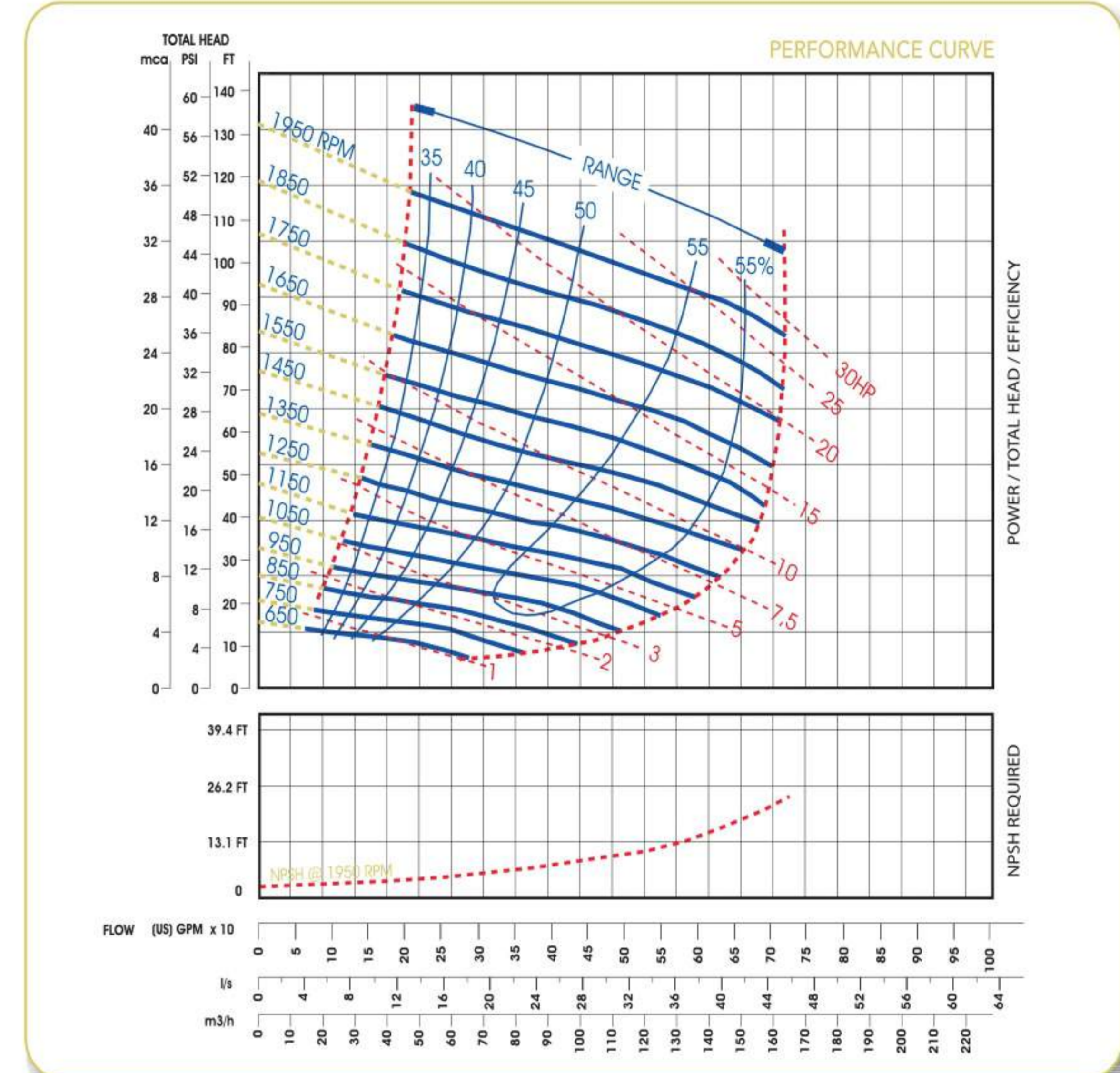
**3" x 3"**

Net Weight  
**183 kg**  
Shipping Weight  
**205 kg**  
Impeller Diameter  
**222 mm**  
Max Solids  
Dia.  
**63.5 mm**



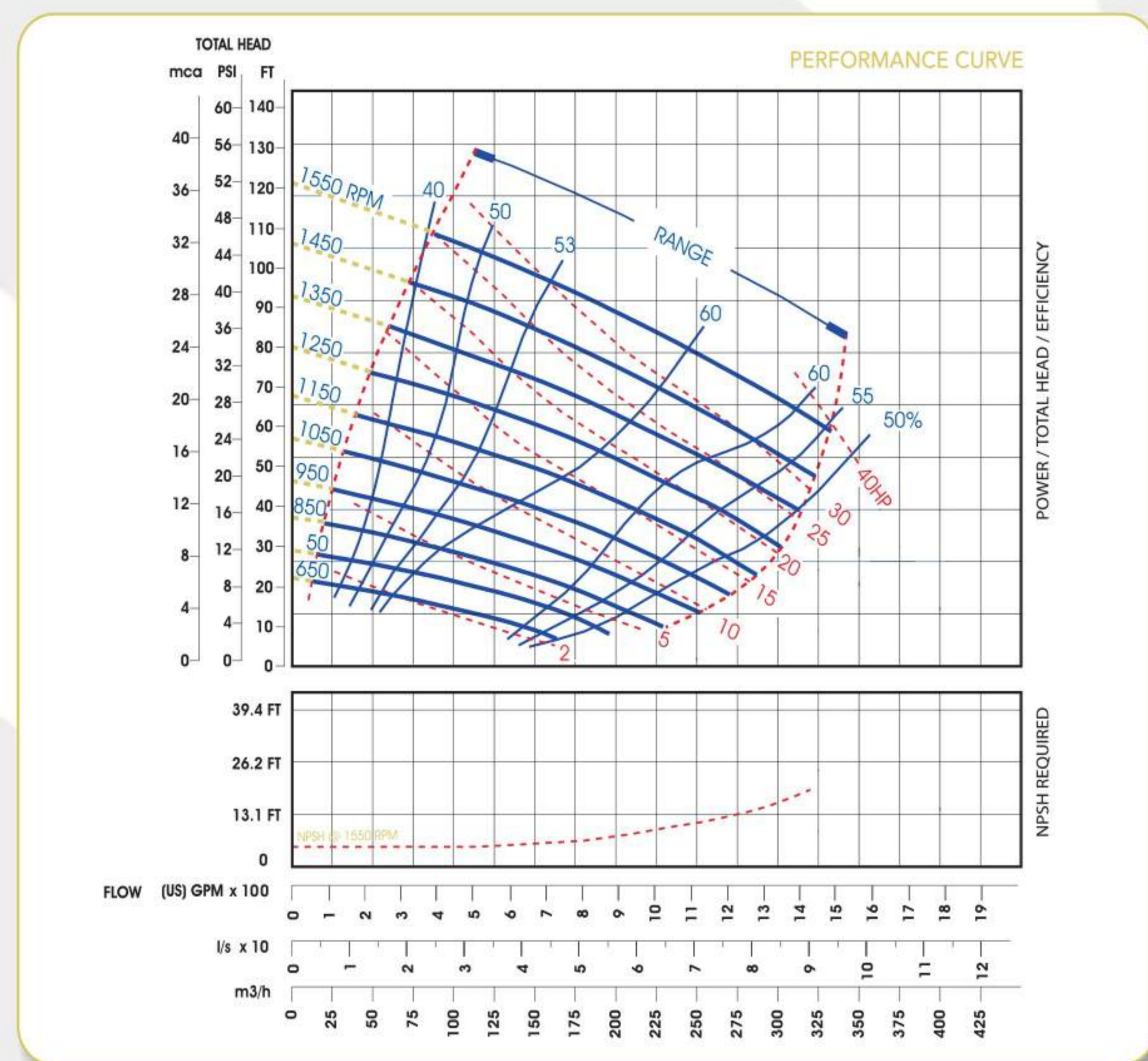
**4" x 4"**

Net Weight  
**260 kg**  
Shipping Weight  
**280 kg**  
Impeller Diameter  
**248 mm**  
Max Solids  
Dia.  
**76.2 mm**



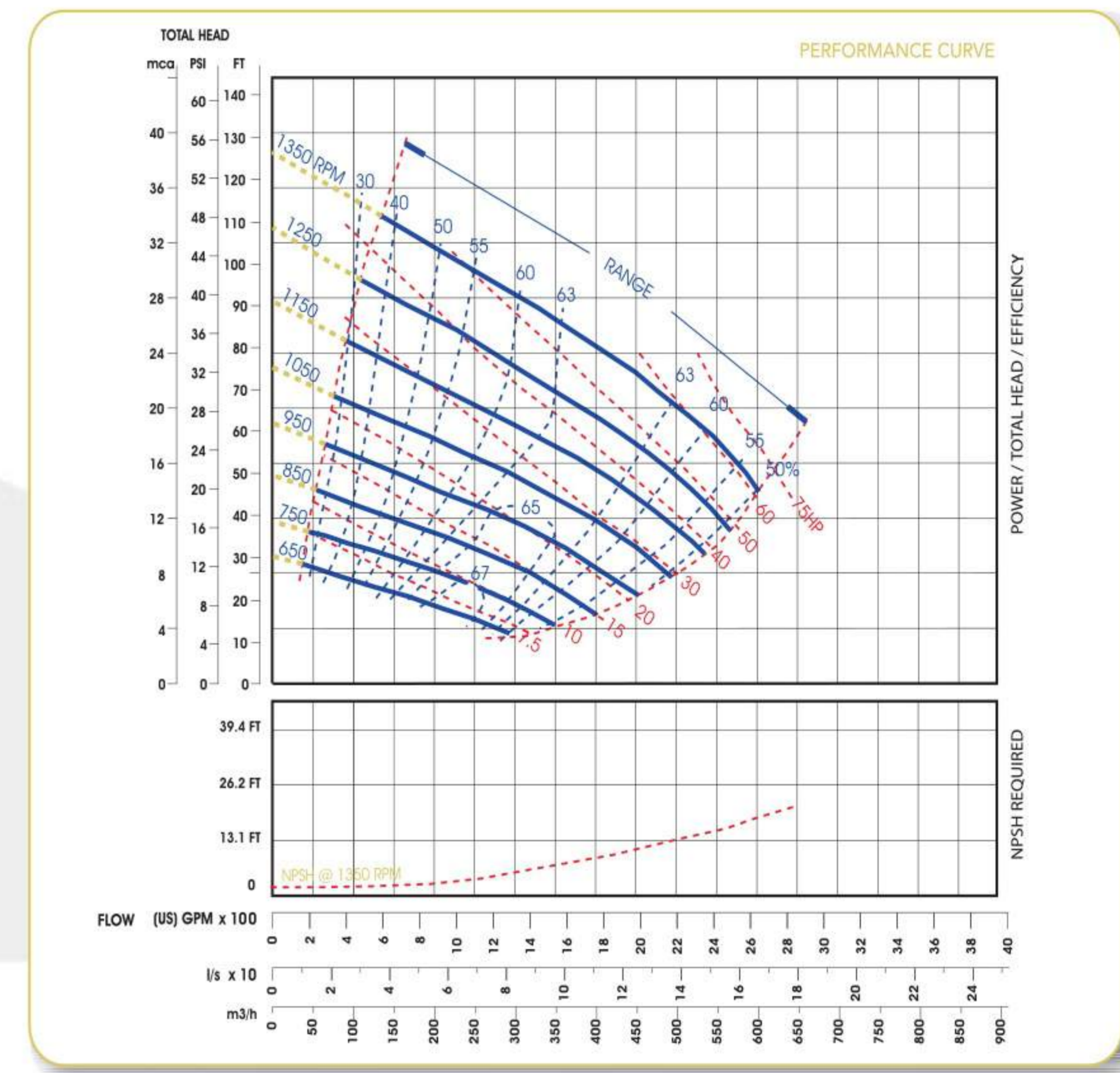
**6" x 6"**

Net Weight  
**364 kg**  
Shipping Weight  
**391 kg**  
Impeller Diameter  
**341 mm**  
Max Solids  
Dia.  
**76.2 mm**



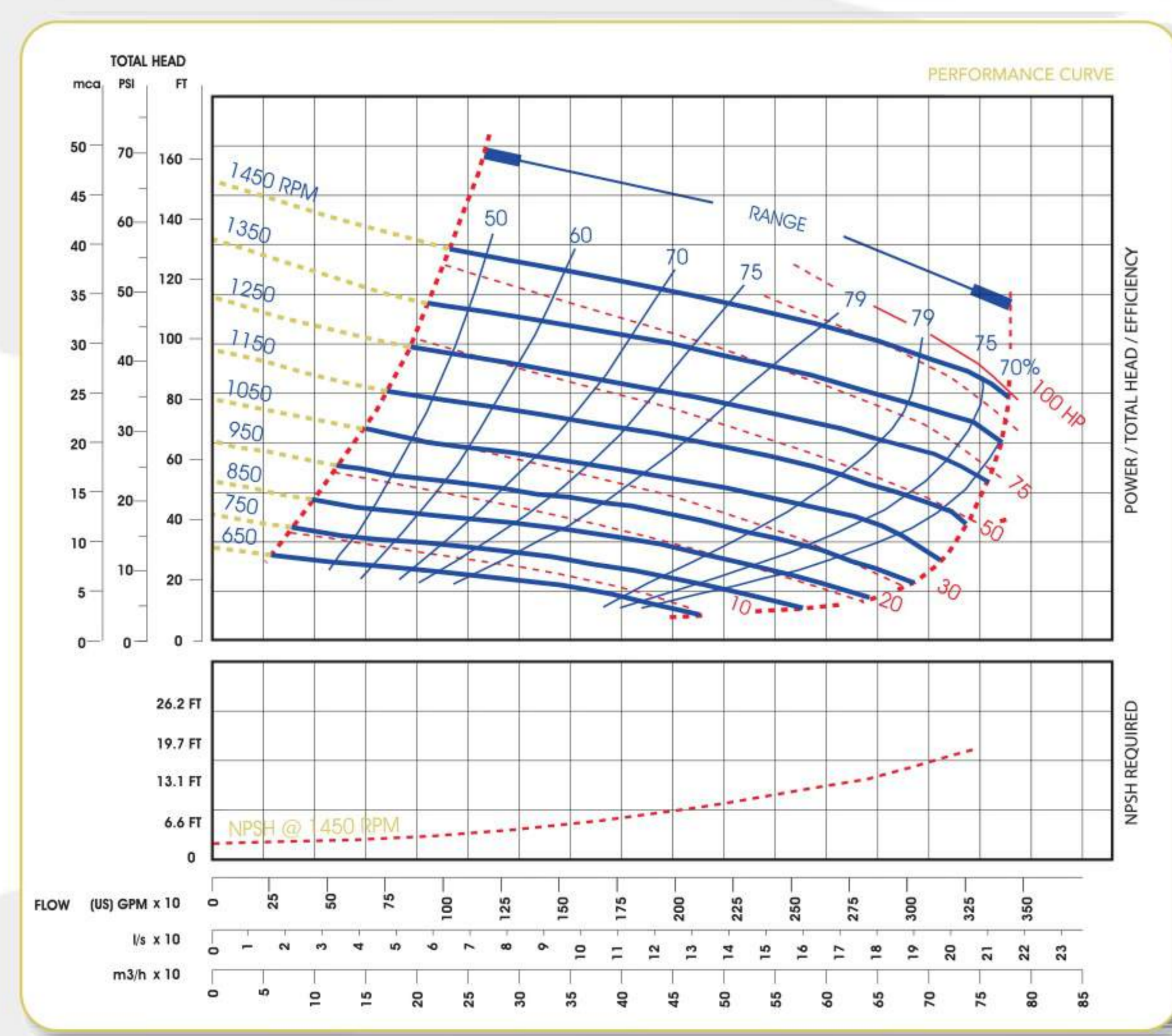
**8" x 8"**

Net Weight  
**581 kg**  
Shipping Weight  
**634 kg**  
Impeller Diameter  
**375 mm**  
Max Solids  
Dia.  
**76.2 mm**



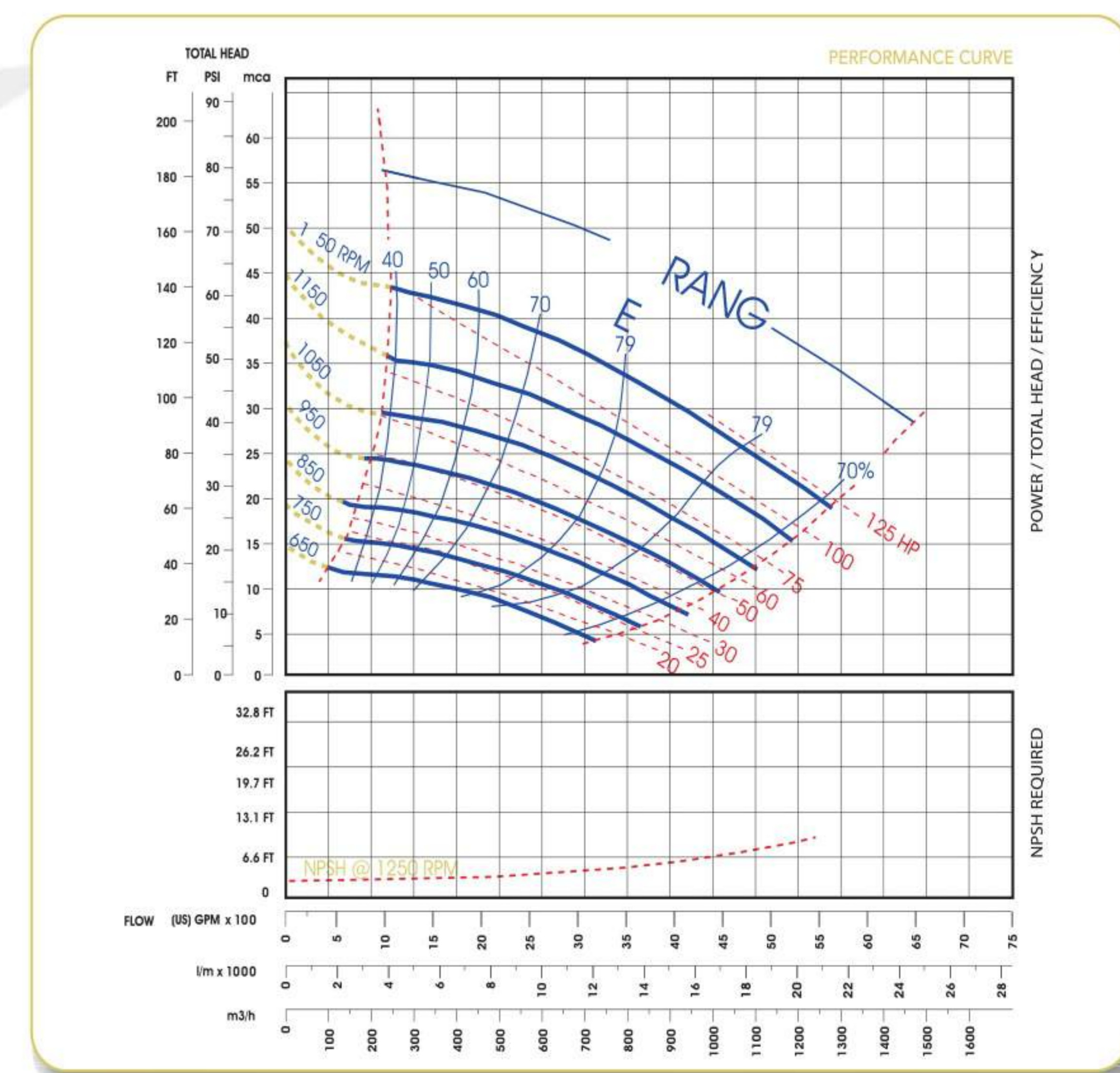
**10" x 10"**

Net Weight  
**635 kg**  
Shipping Weight  
**663 kg**  
Impeller Diameter  
**375 mm**  
Max Solids  
Dia.  
**76.2 mm**



**12" x 12"**

Net Weight  
**998 kg**  
Shipping Weight  
**1066 kg**  
Impeller Diameter  
**457 mm**  
Max Solids  
Dia.  
**76.2 mm**



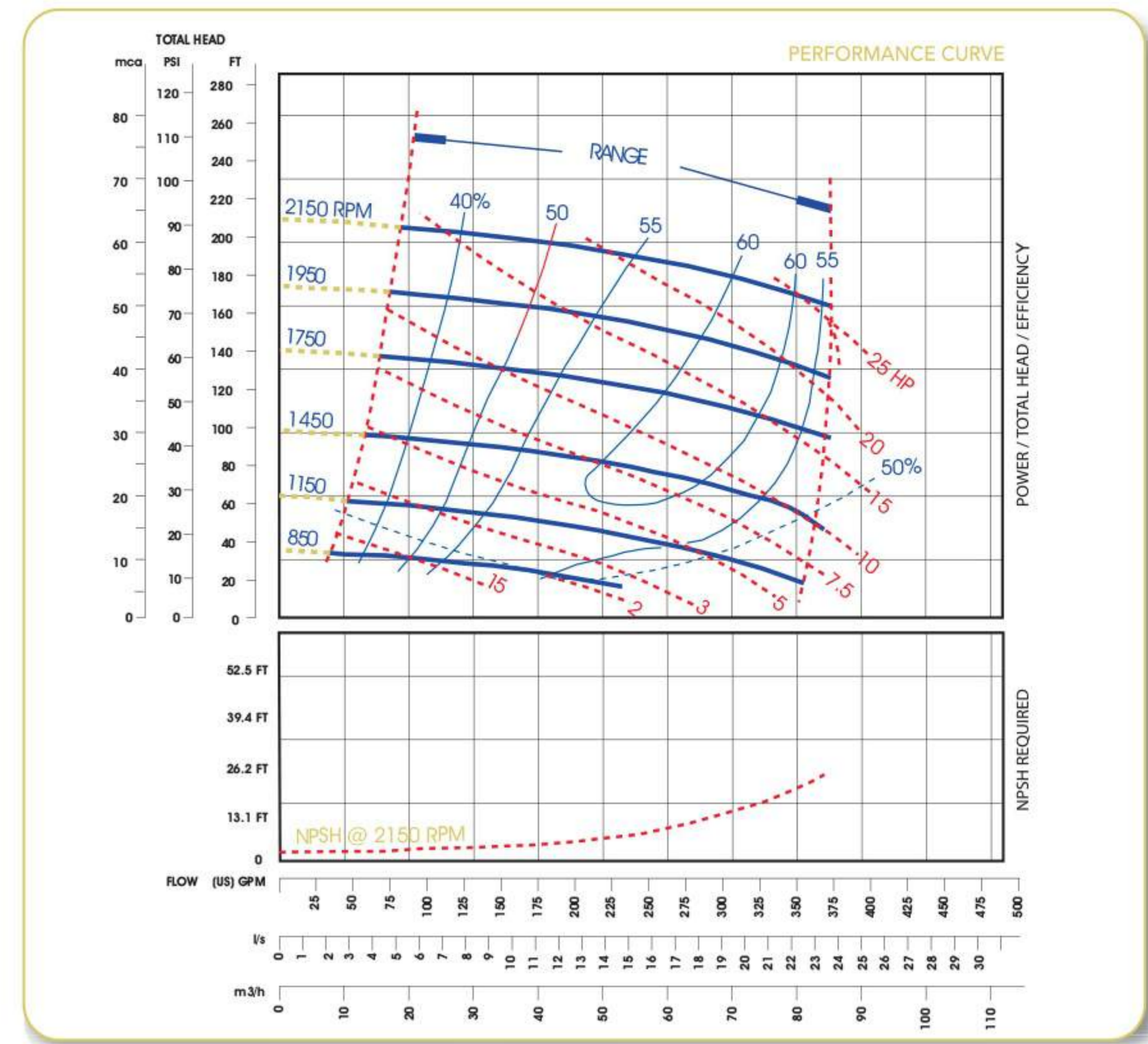
# SERIES II

## Self Priming

### Curves

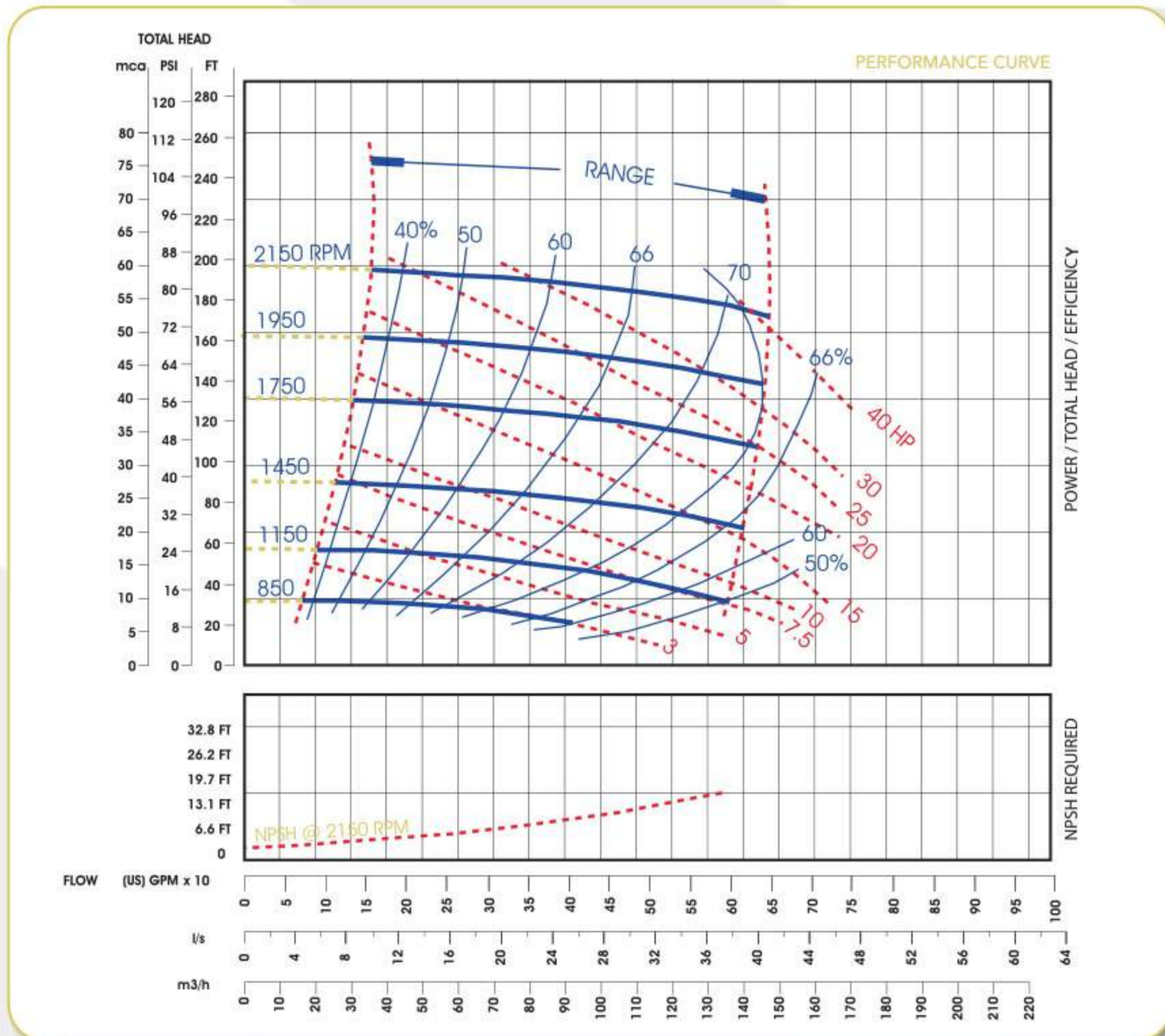
**3" x 3"**

Net Weight  
**214 kg**  
Shipping Weight  
**225 kg**  
Impeller Diameter  
**279 mm**  
Max Solids  
Dia.  
**20.6 mm**



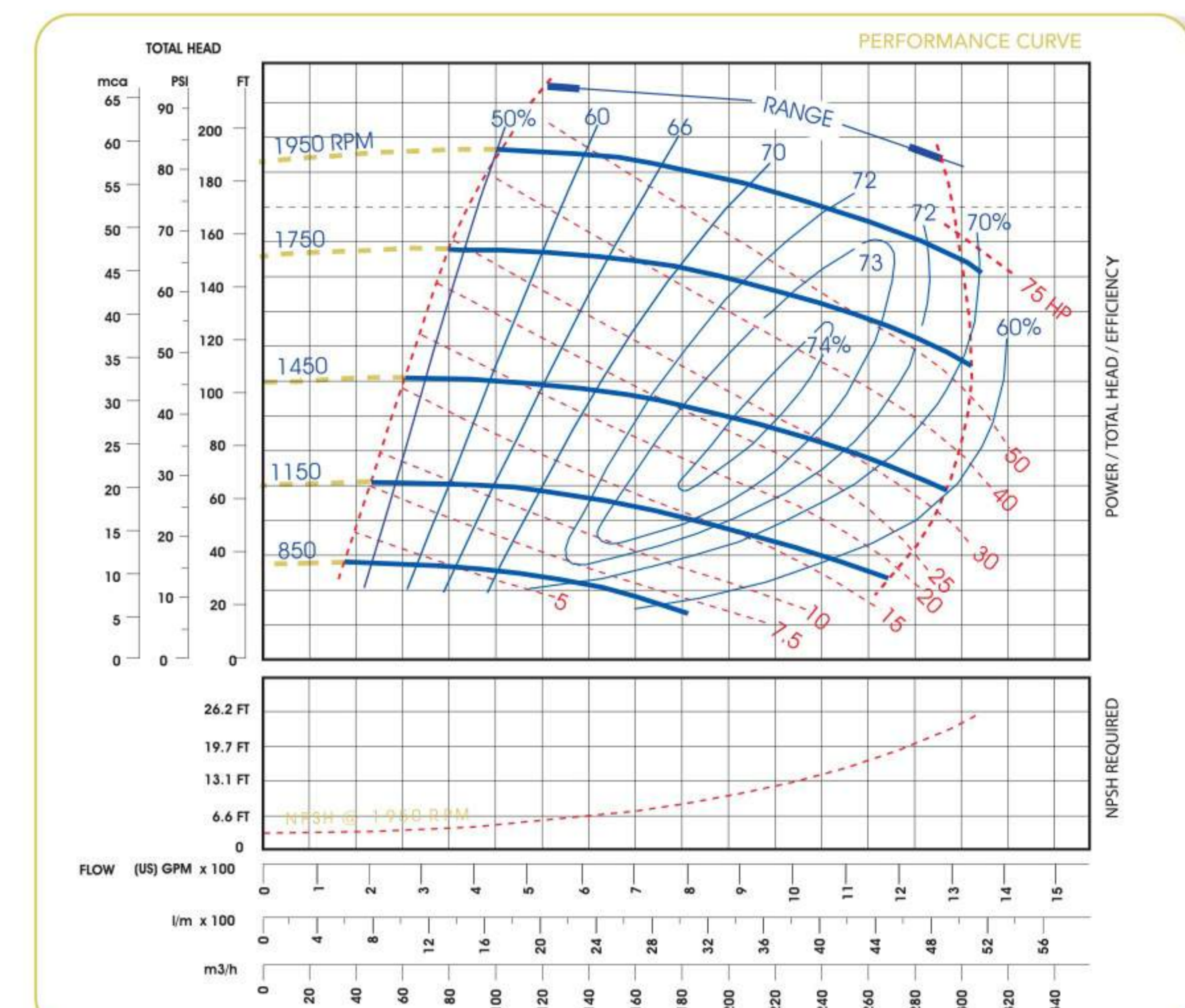
**4" x 4"**

Net Weight  
**272 kg**  
Shipping Weight  
**297 kg**  
Impeller Diameter  
**279 mm**  
Max Solids  
Dia.  
**28.6 mm**



**6" x 6"**

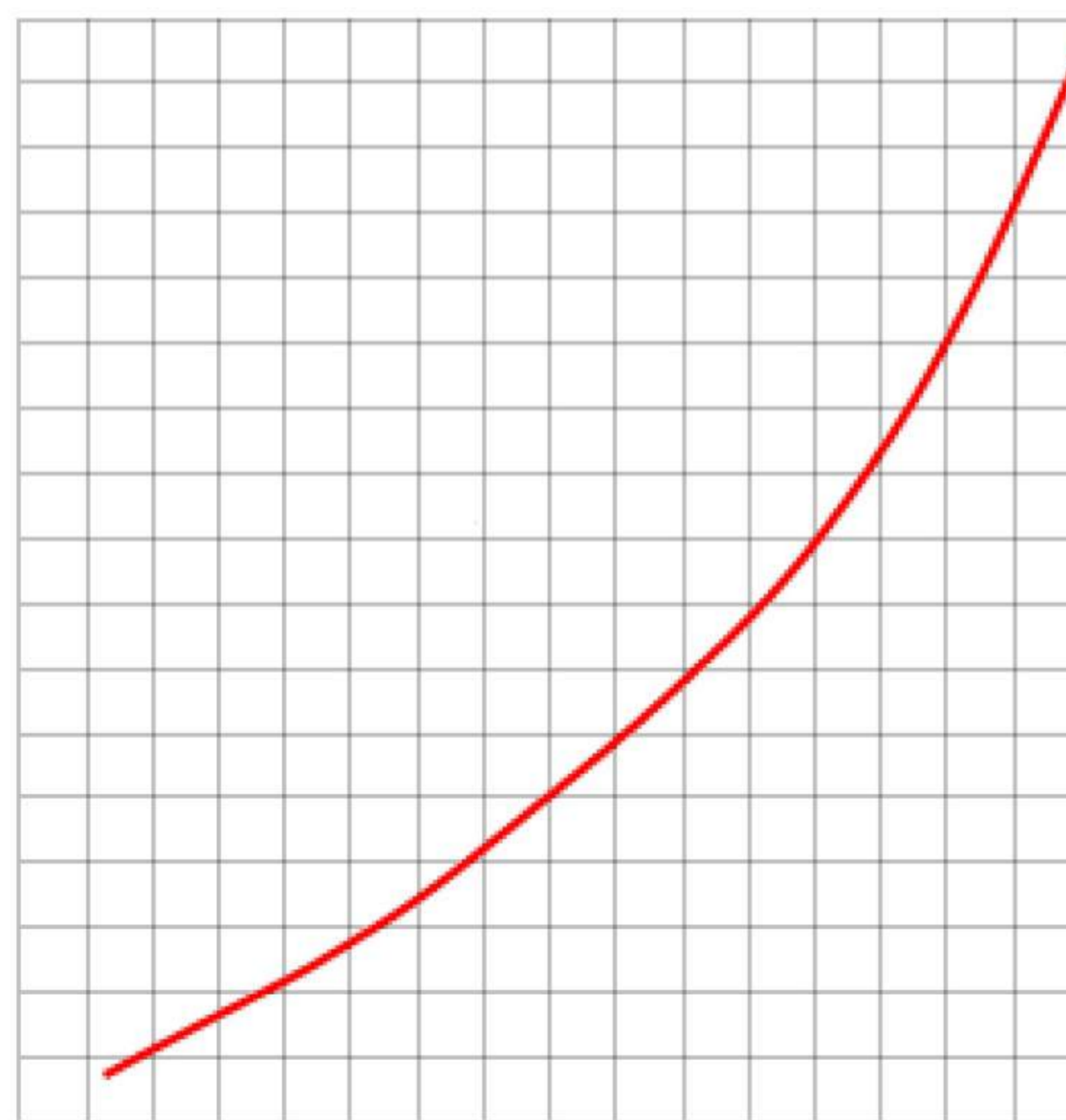
Net Weight  
**413 kg**  
Shipping Weight  
**437 kg**  
Impeller Diameter  
**318 mm**  
Max Solids  
Dia.  
**31.8 mm**



SUBMERGENCE (MIN)

M	FT
5.15	17
4.88	16
5.57	15
4.27	14
3.96	13
3.66	12
3.35	11
3.05	10
2.74	9
2.44	8
2.13	7
1.83	6
1.52	5
1.22	4
0.91	3
0.61	2
0.30	1
0	0

SUCTION SPEED FLOW CURVE



Vel. (ft/s)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Vel. (m/s)	0.30	0.61	0.91	1.22	1.52	1.83	2.13	2.43	2.74	3.05	3.35	3.66	3.96	4.27	4.57	4.88

Note 1: The suggested suction should have the same nominal diameter as the pump, so that the solids will be totally swept up.

2: If the speed is higher than 3.5 m/s and if there is a need for higher "NPSH", please contact the factory.