



## END SUCTION PUMPS 50Hz PERFORMANCE

# SELECTION CHART

## 1450/2900 R.P.M.



**PENTAIR**

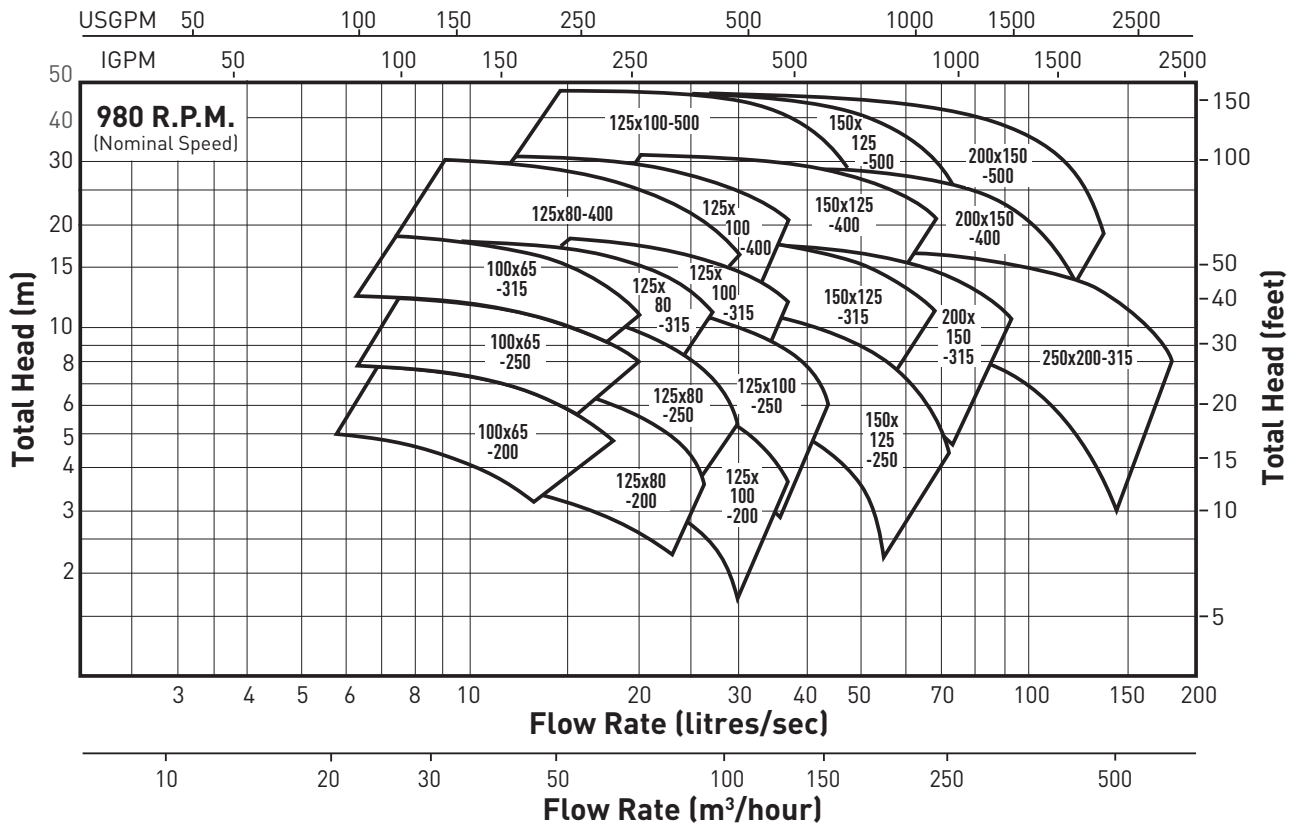
**ISO5199**

END SUCTION PUMPS  
50Hz PERFORMANCE

SELECTION CHART

**970**

CENTRIFUGAL PUMP PERFORMANCE DATA





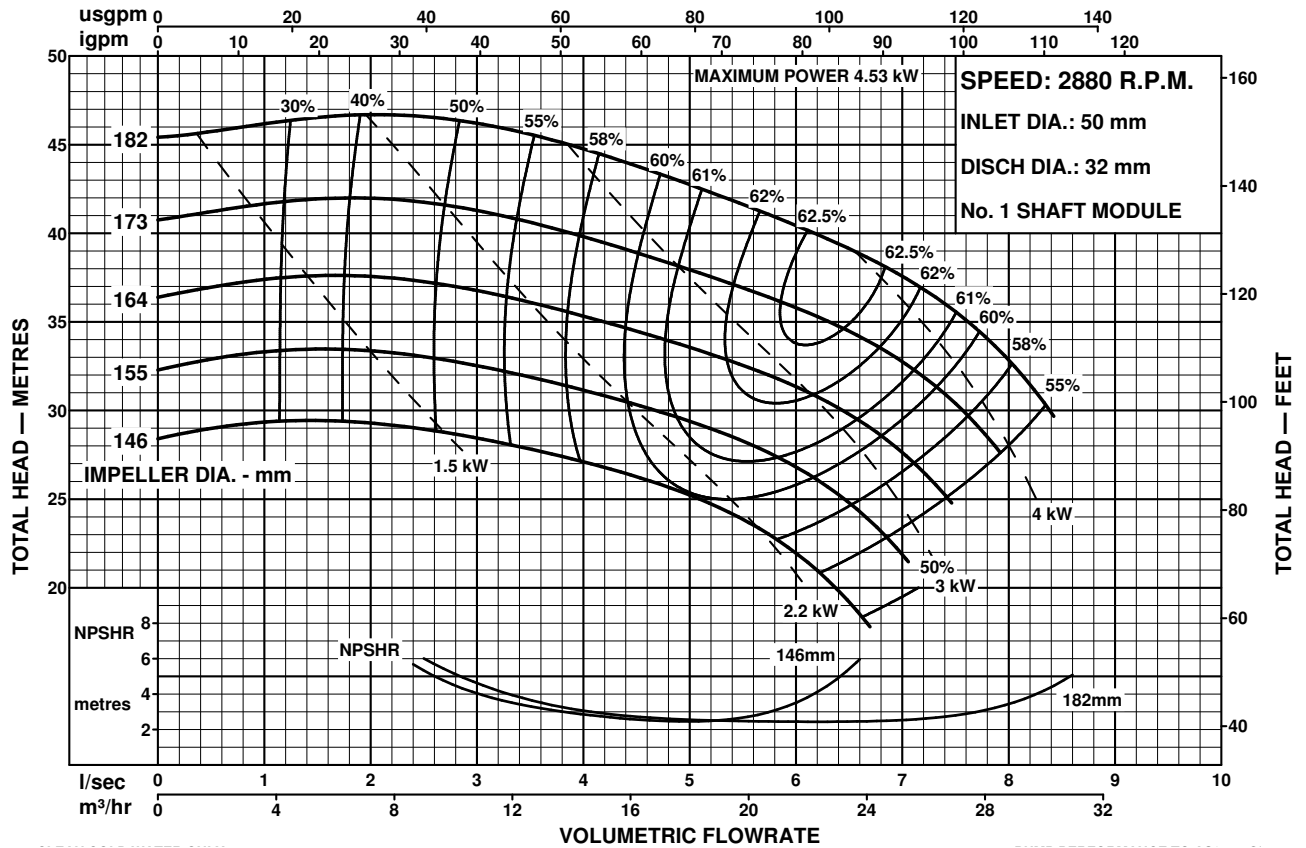
# PENTAIR

## ISO5199

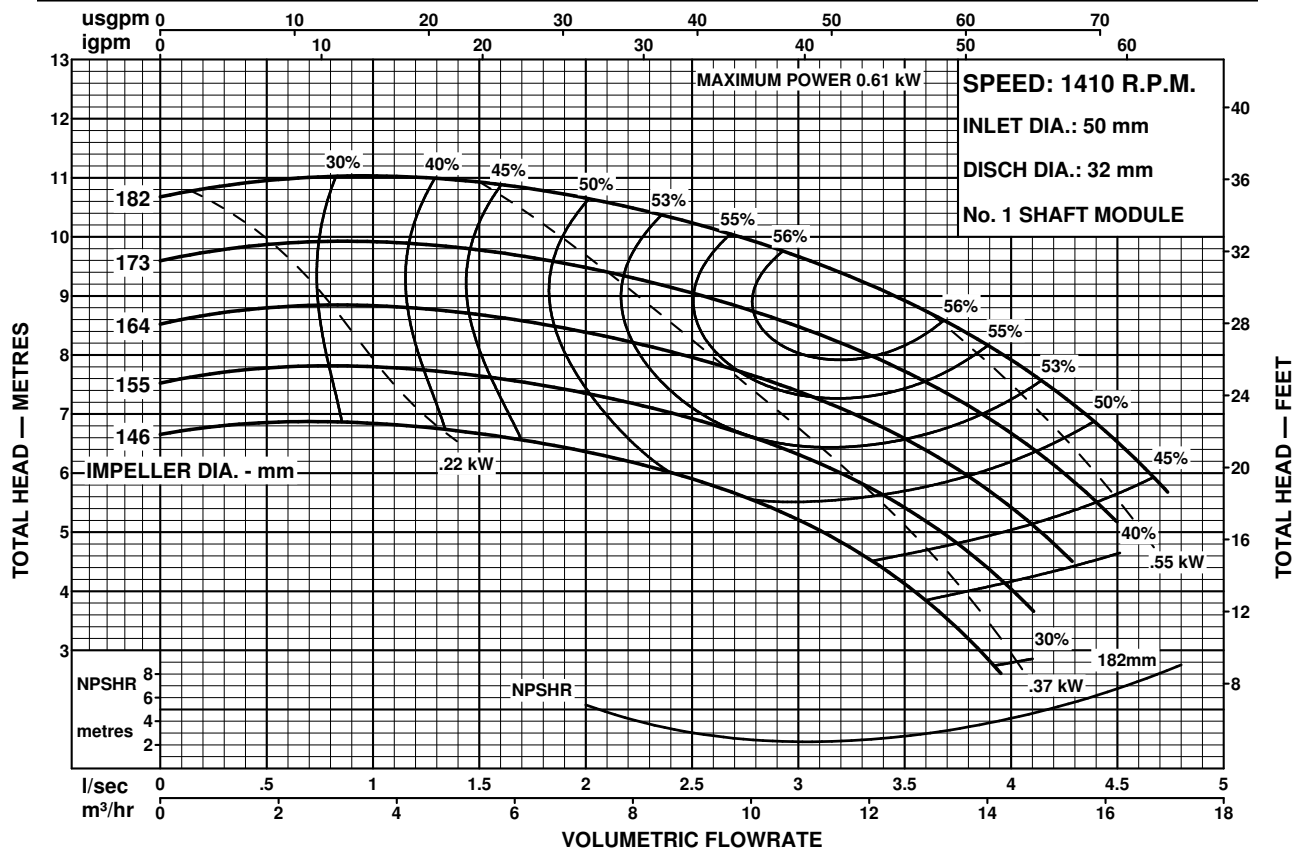
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**50x32-160**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

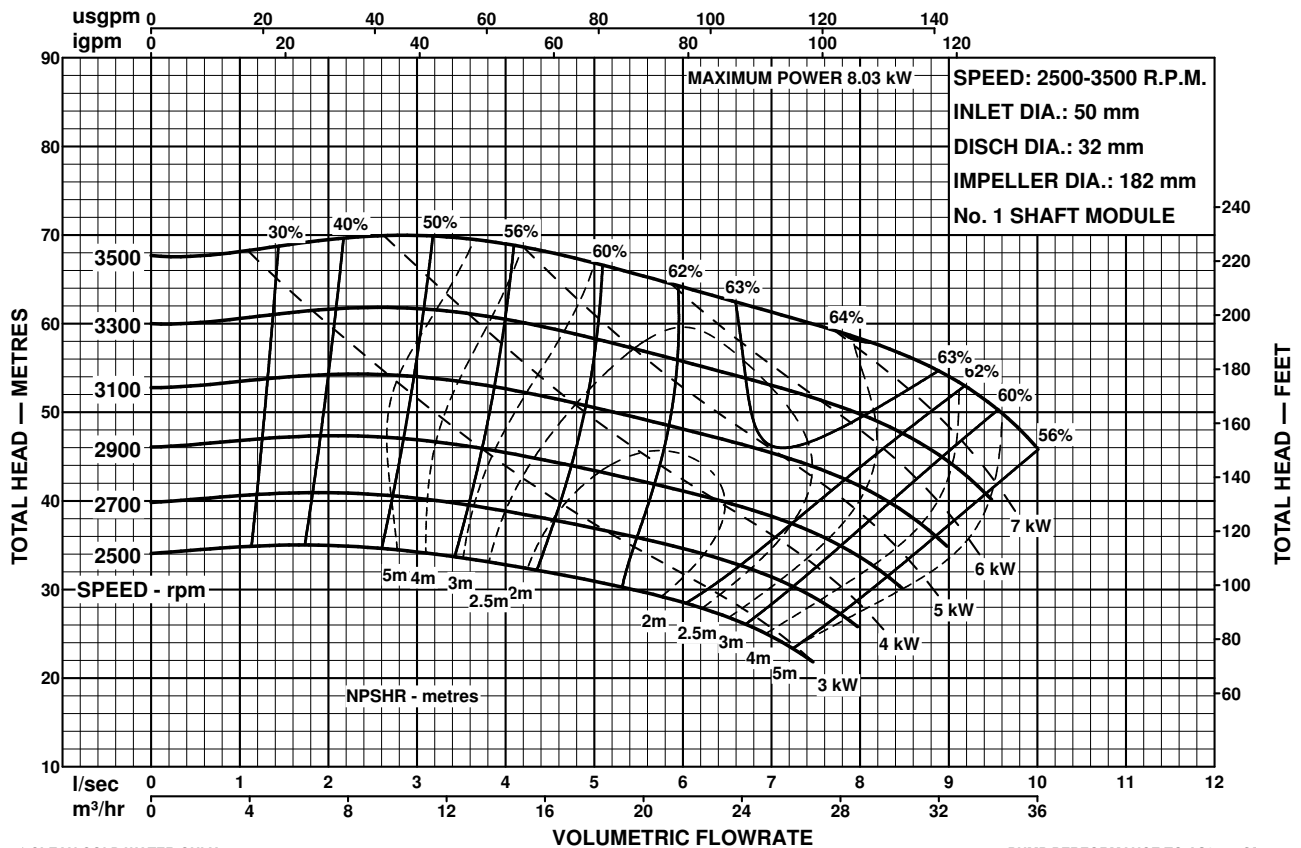
ISO5199

END SUCTION PUMPS

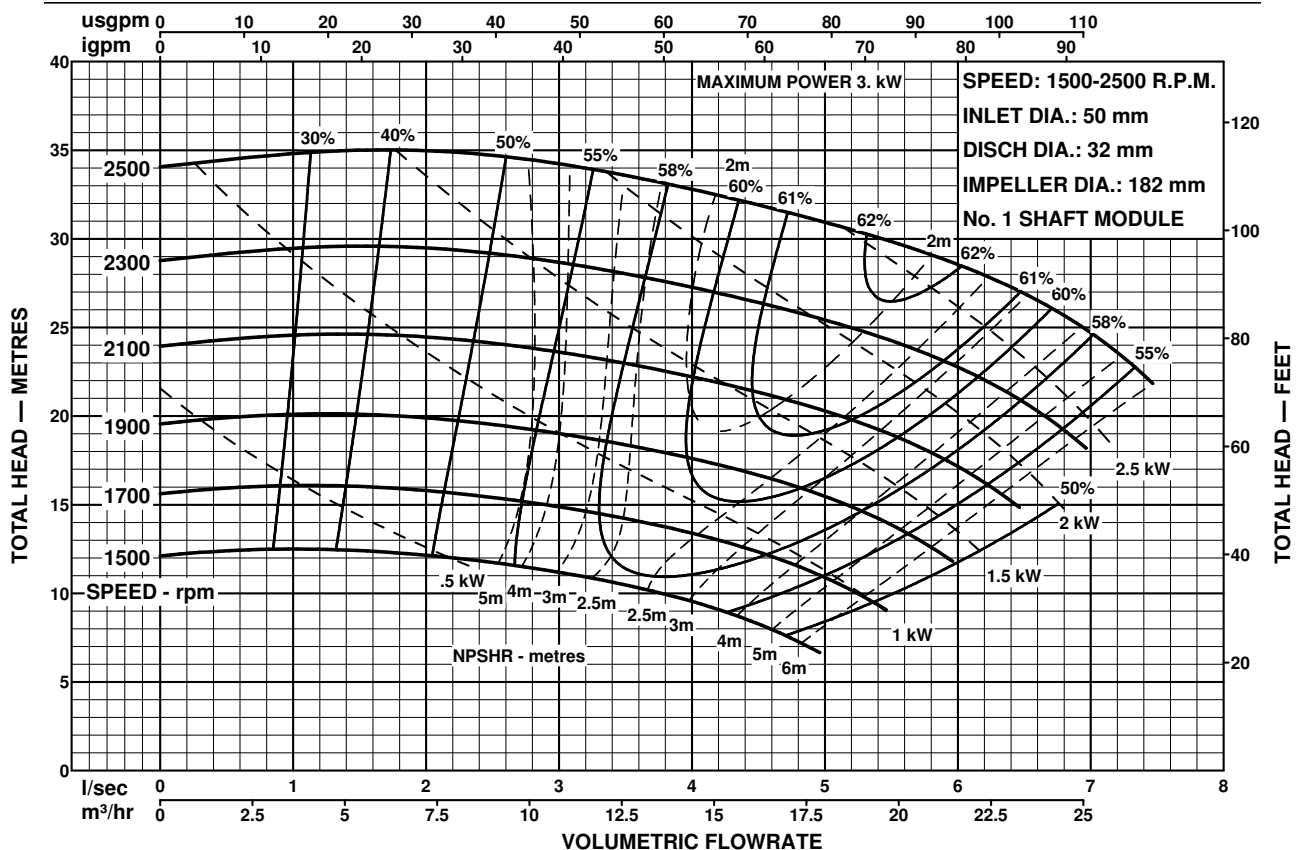
50Hz PERFORMANCE

MODEL  
50x32-160

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





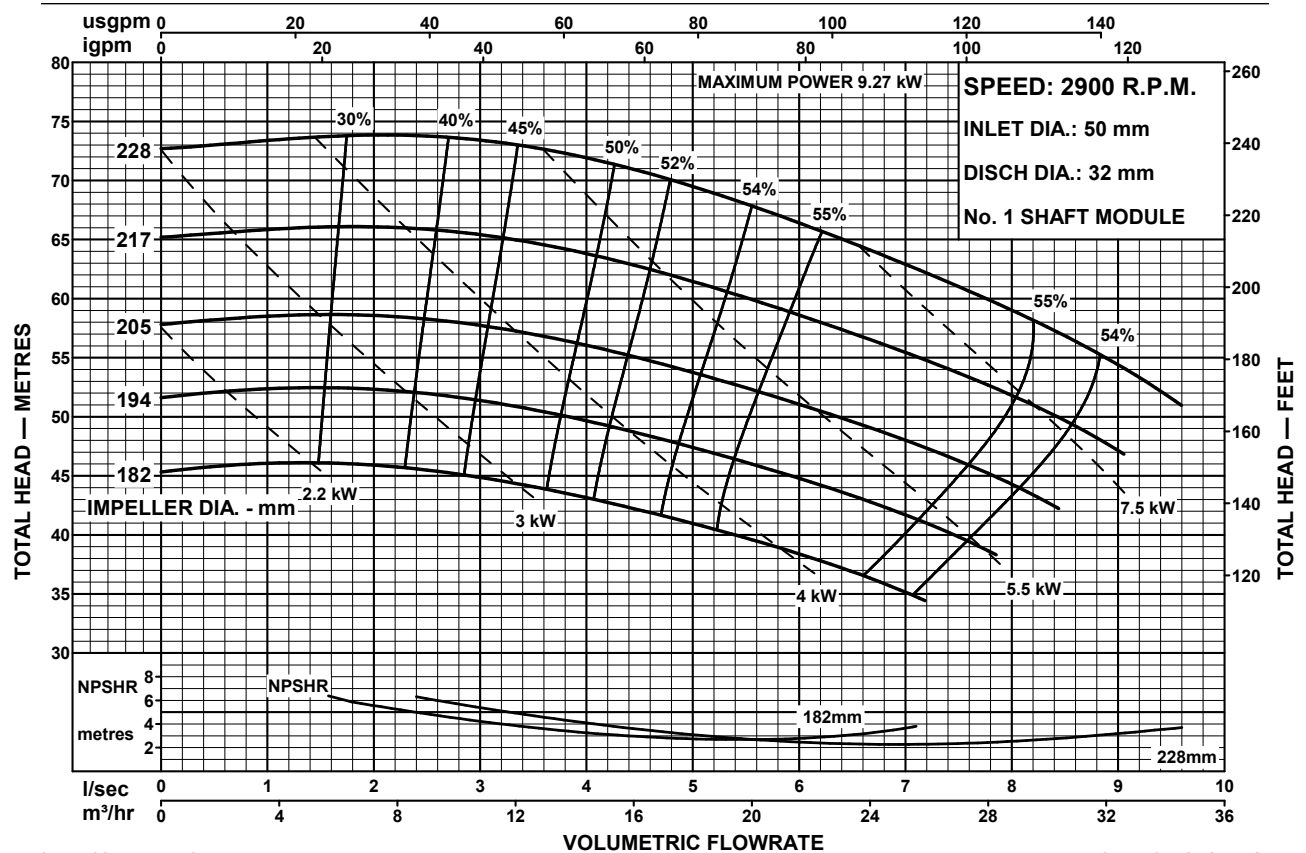
# PENTAIR

# ISO5199

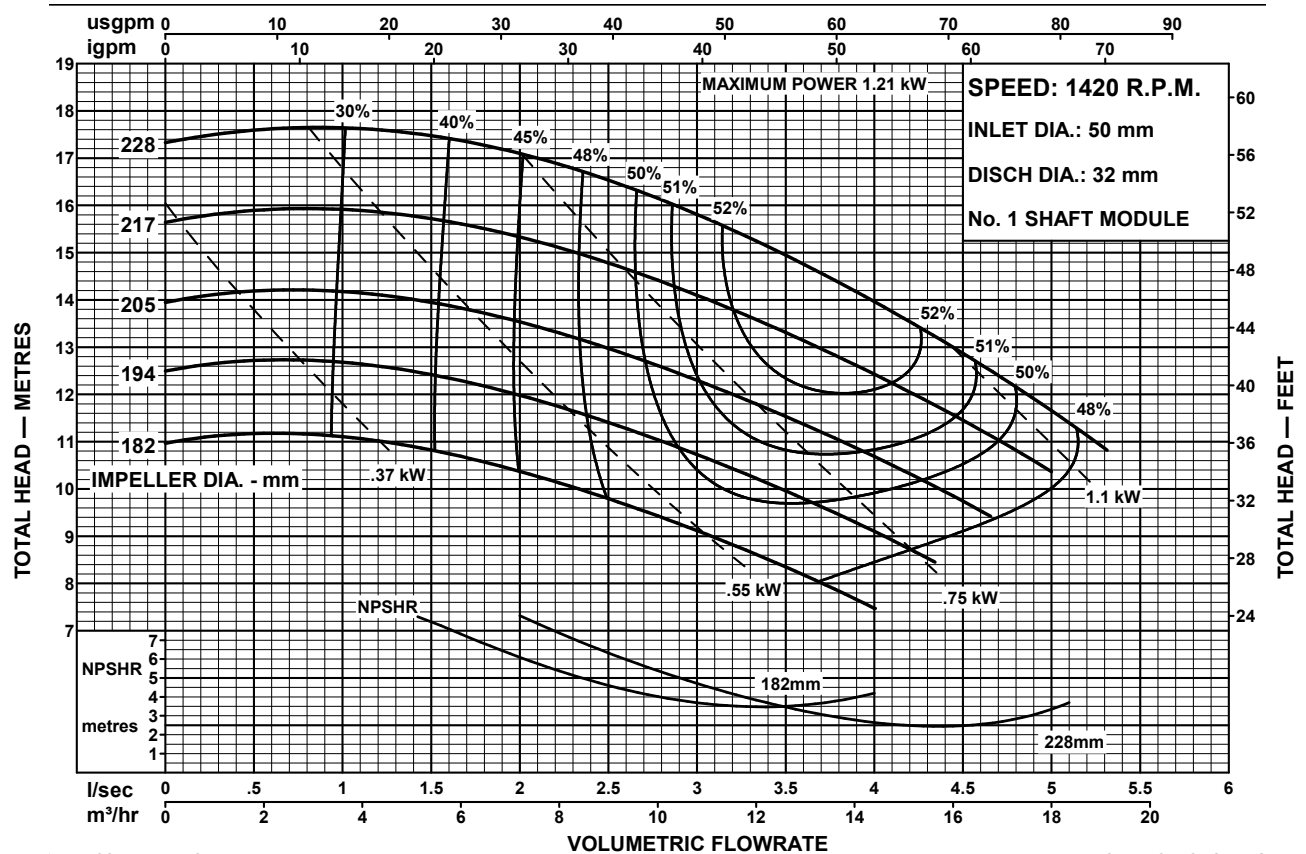
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**50x32-200**

## CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

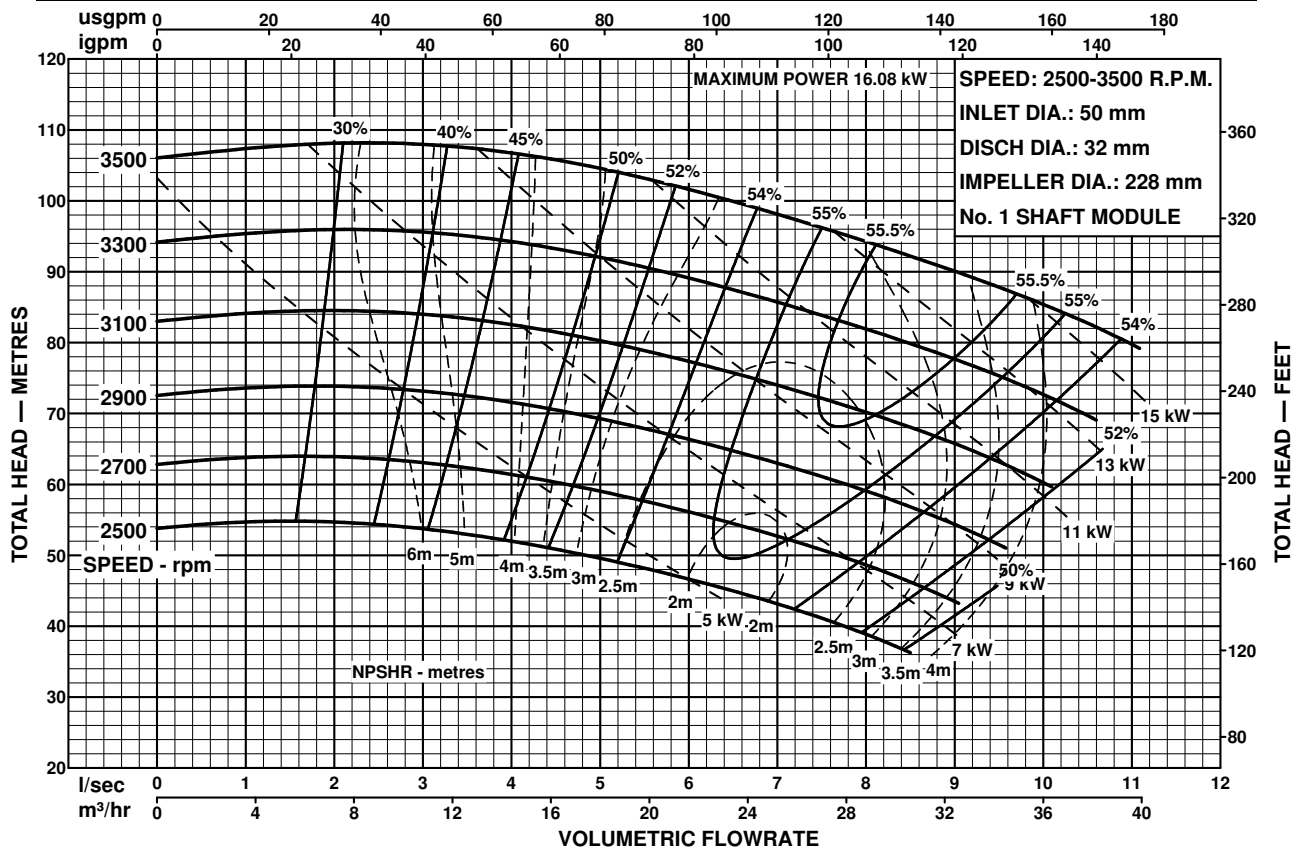
ISO5199

END SUCTION PUMPS

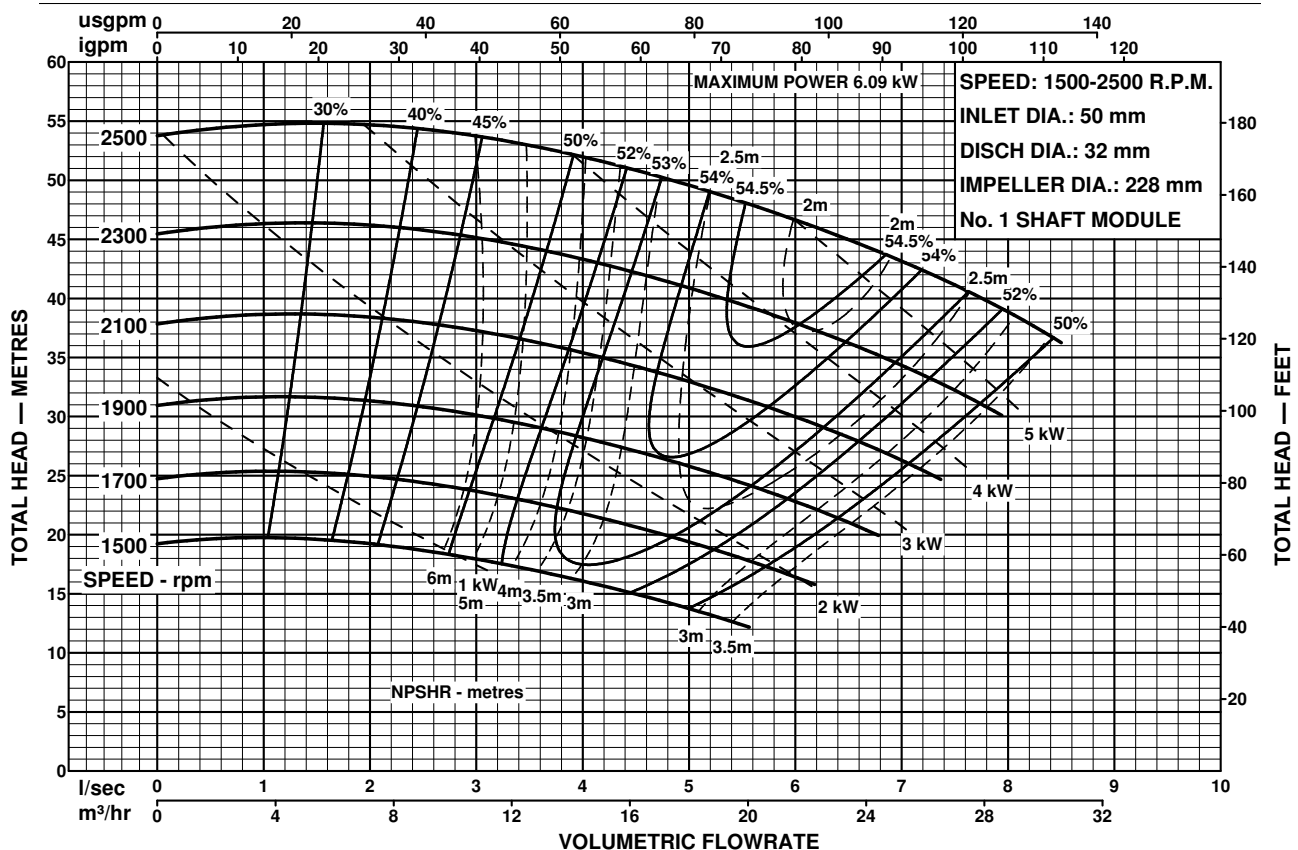
50Hz PERFORMANCE

CENTRIFUGAL PUMP PERFORMANCE DATA

MODEL  
**50x32-200**



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





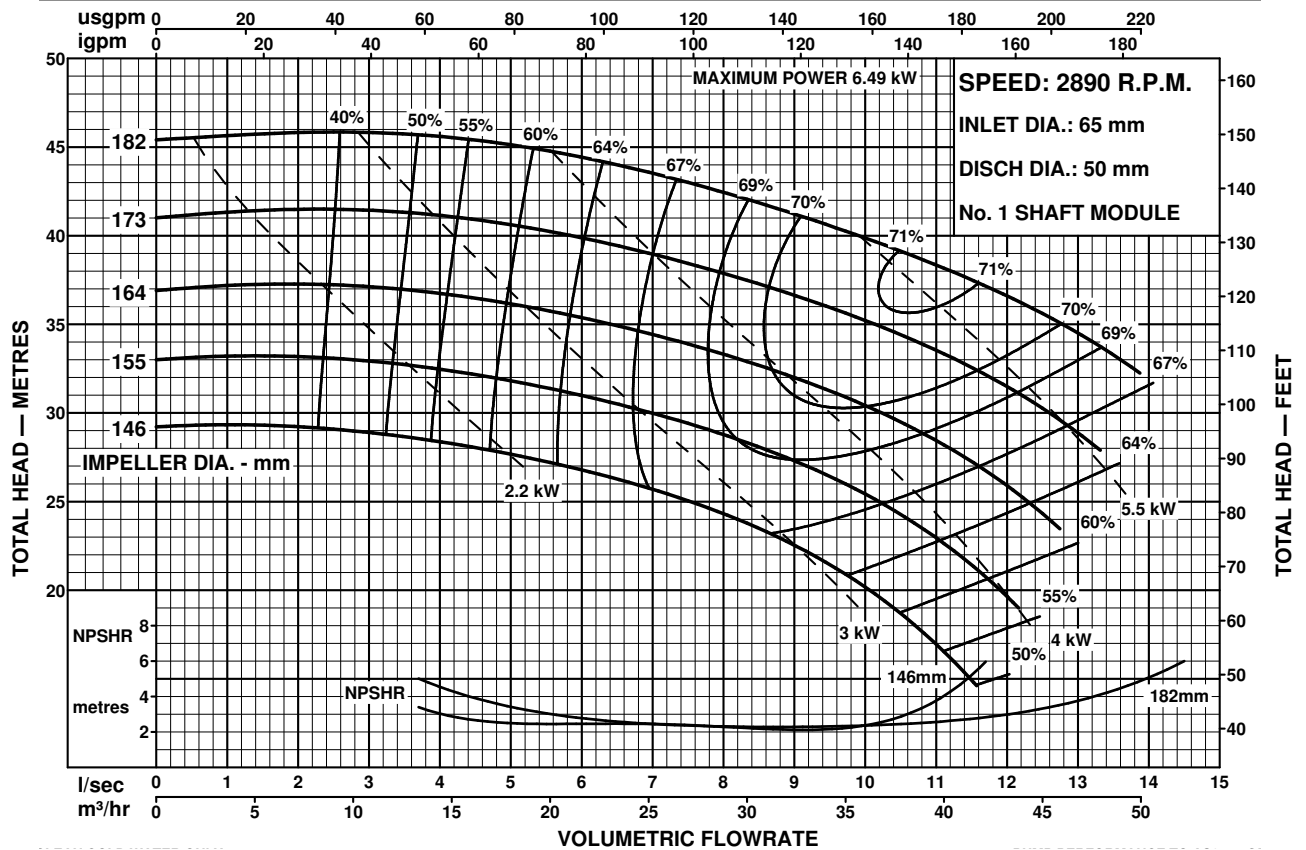


PENTAIR

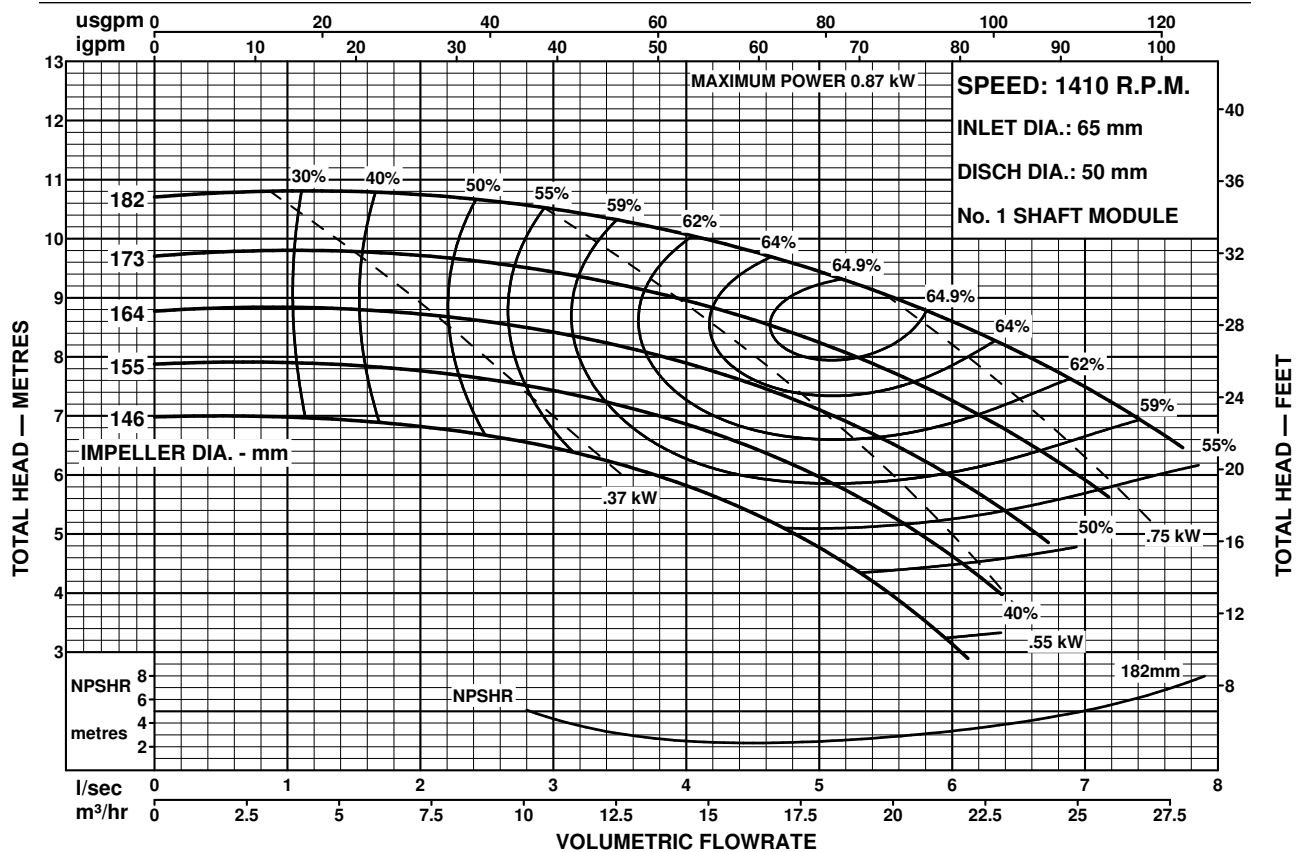
ISO5199  
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**65x50-160**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





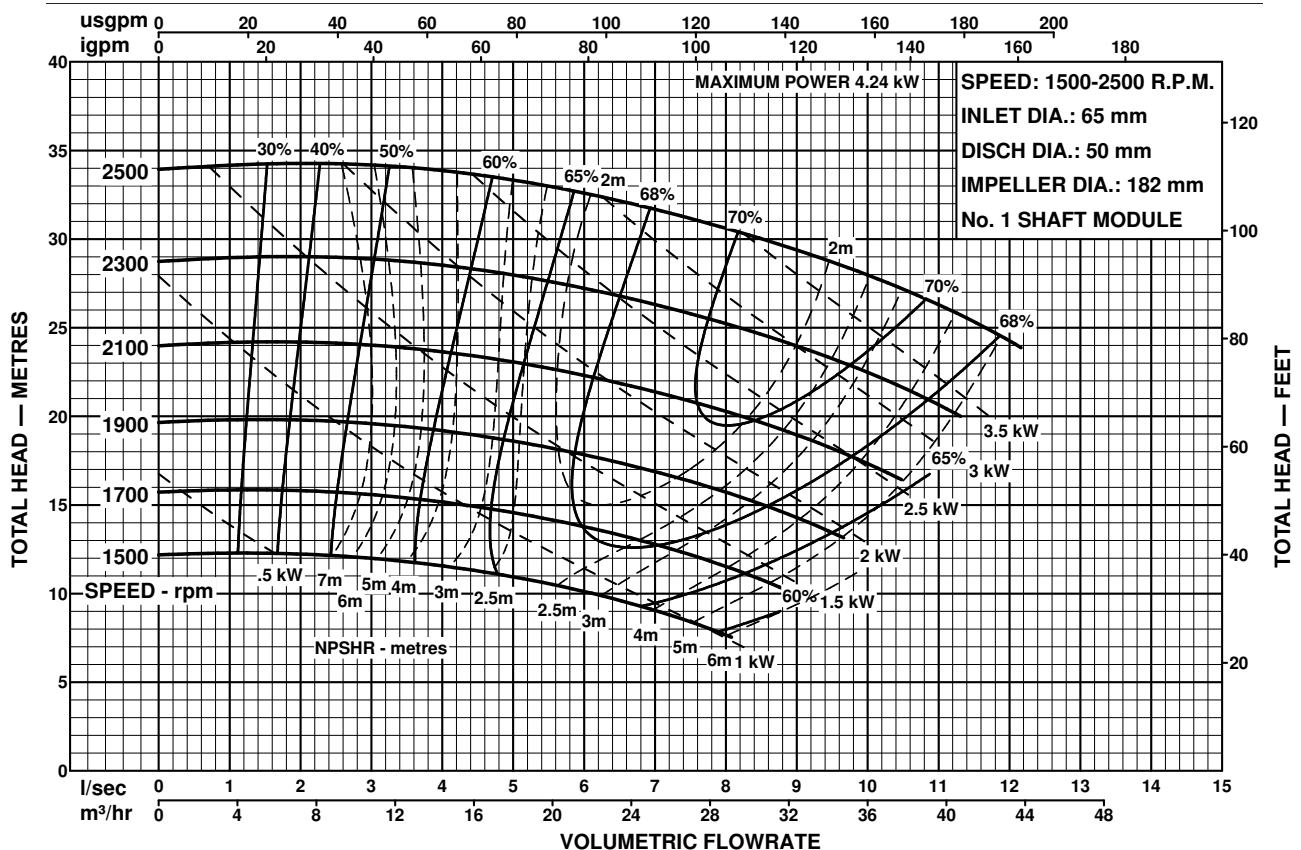
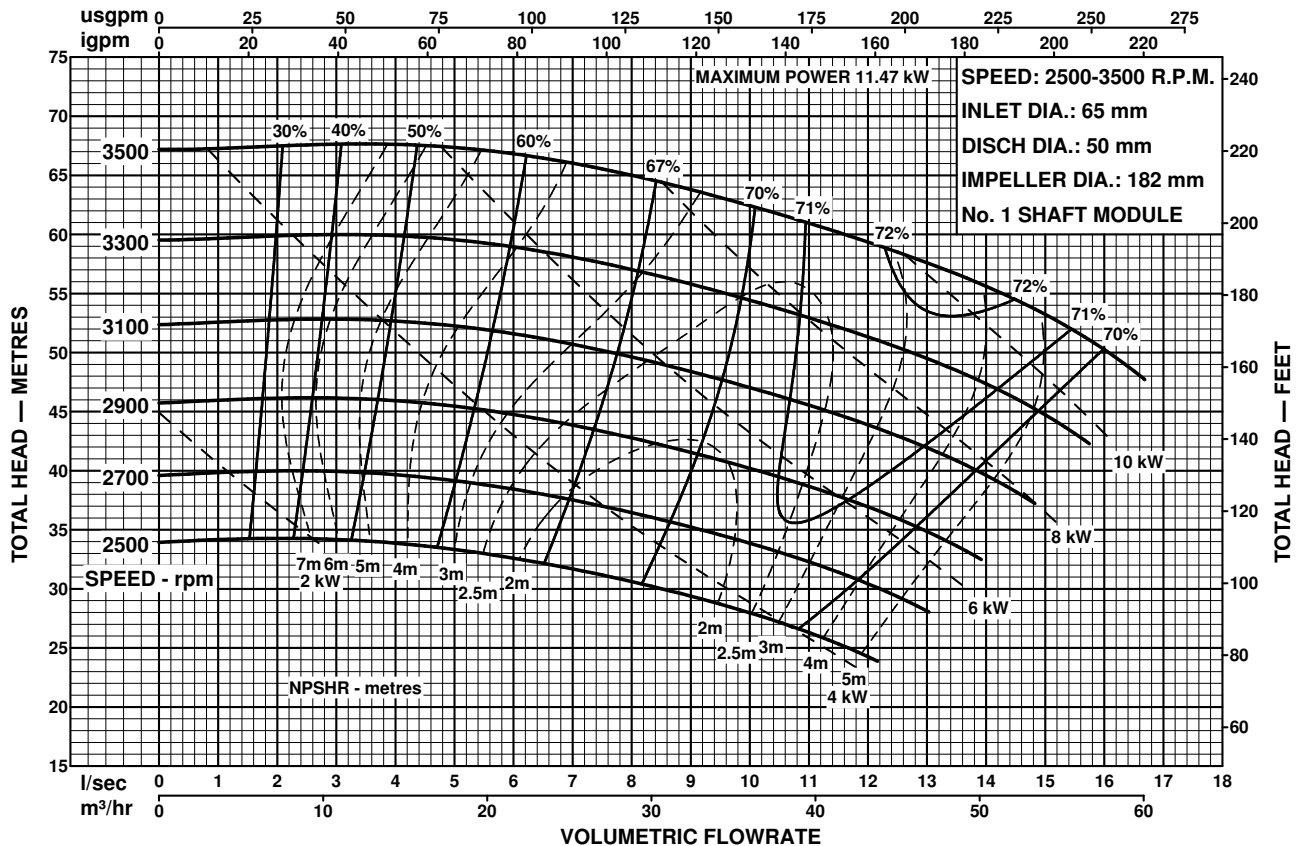
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**65x50-160**

CENTRIFUGAL PUMP PERFORMANCE DATA







PENTAIR

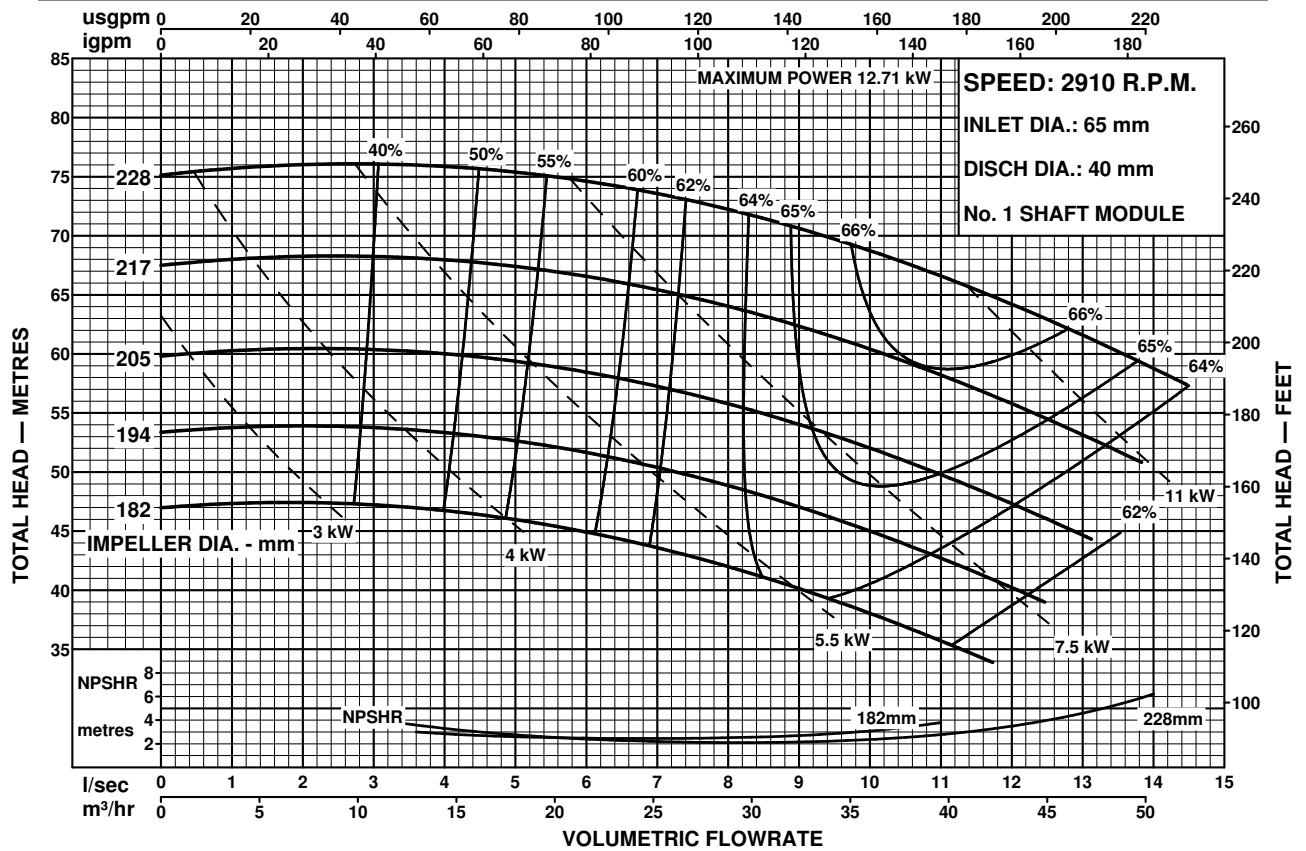
ISO5199

END SUCTION PUMPS

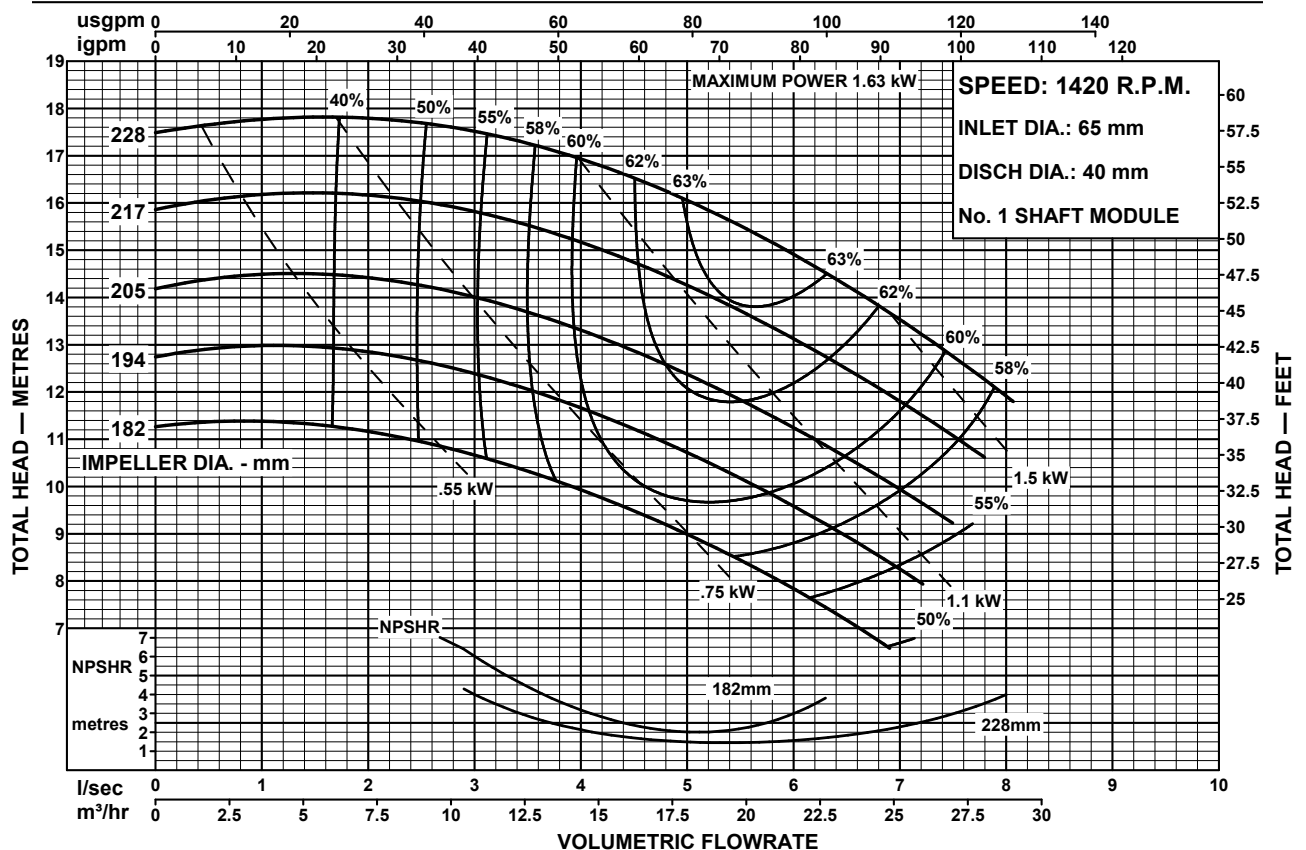
50Hz PERFORMANCE

MODEL  
65x40-200

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





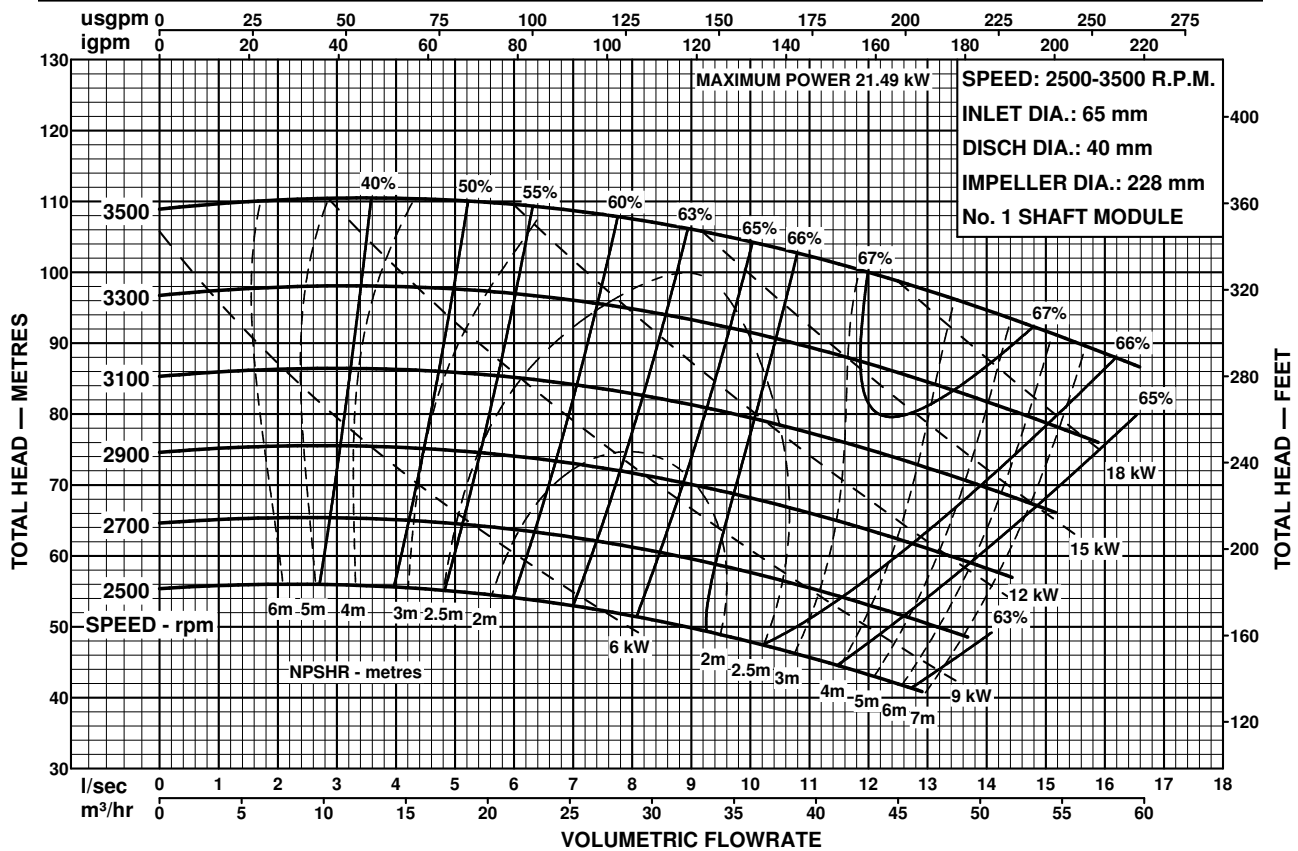
PENTAIR

ISO5199

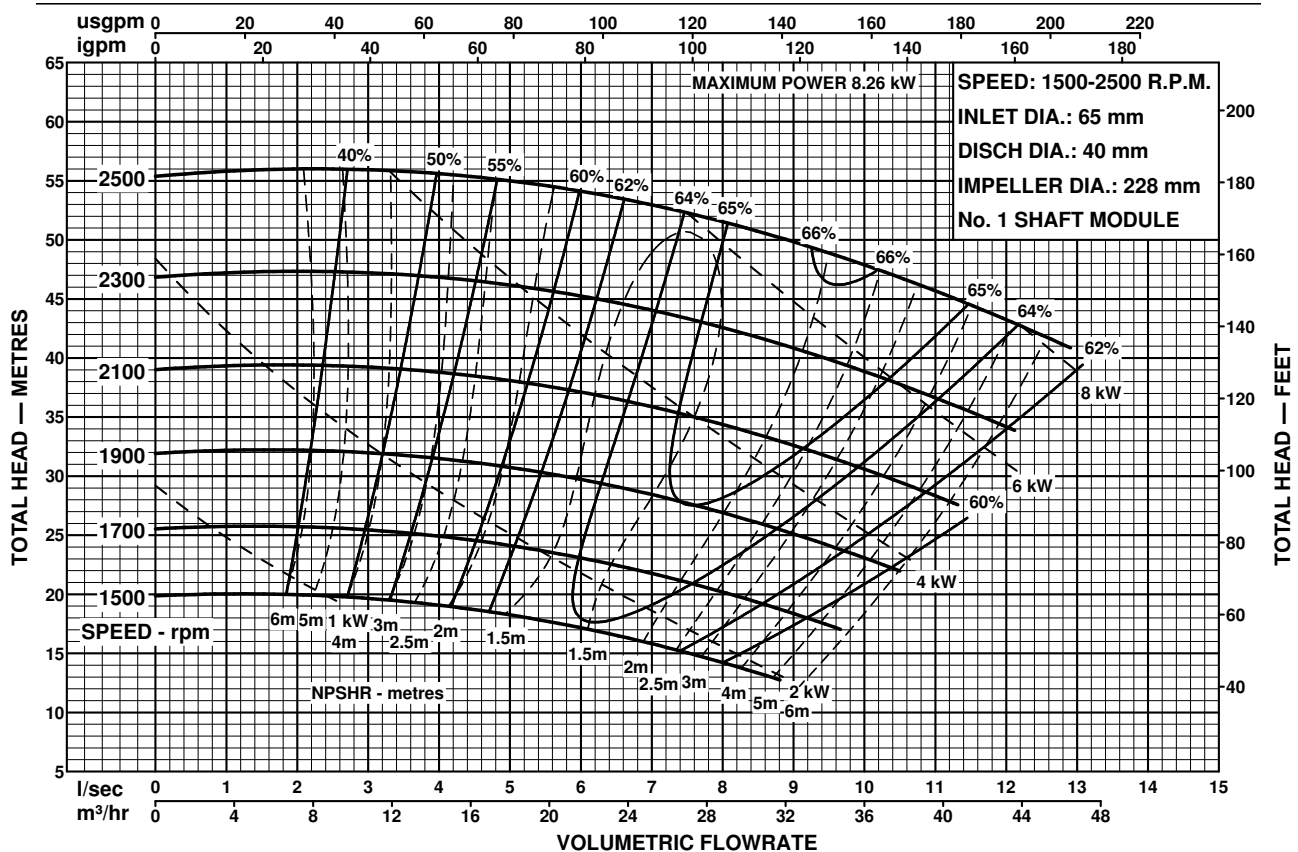
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**65x40-200**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

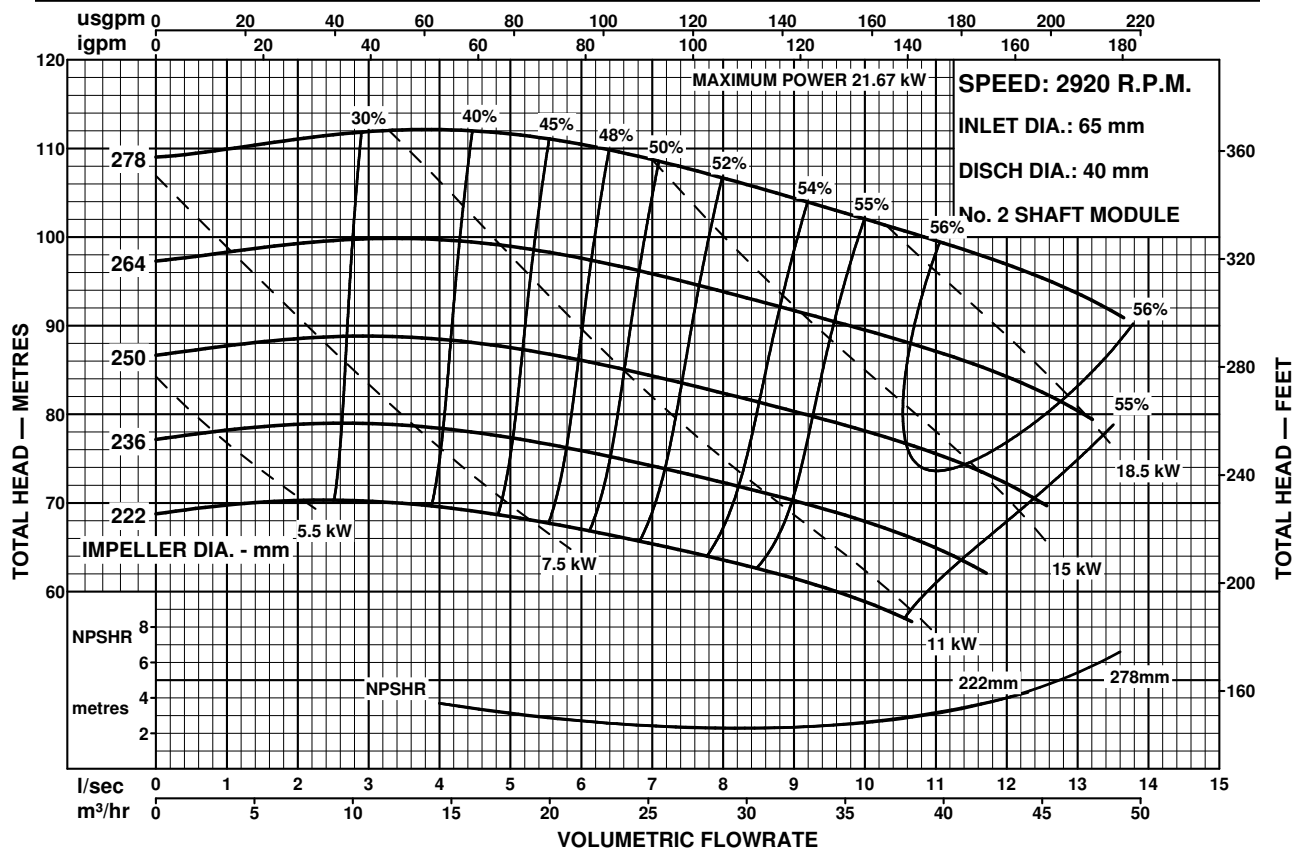
ISO5199

END SUCTION PUMPS

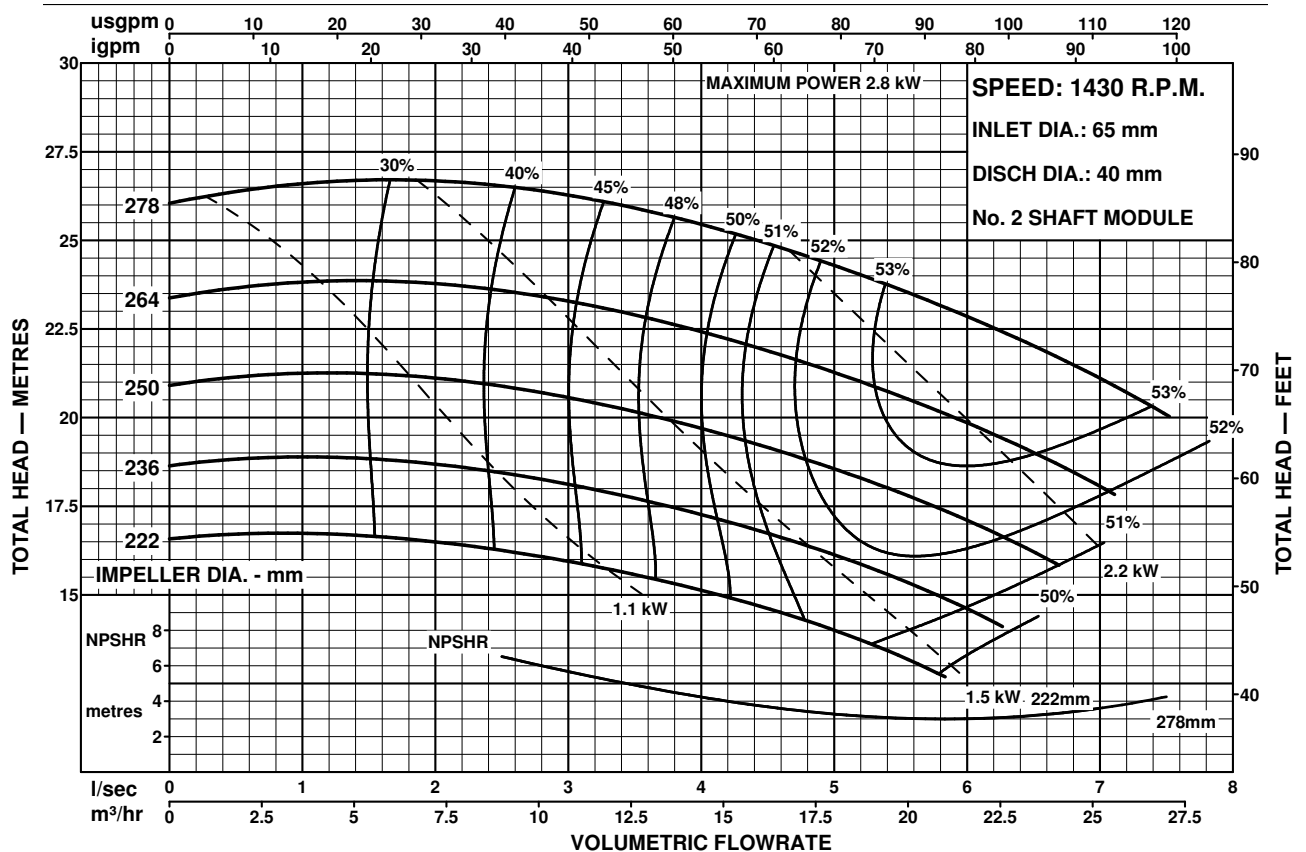
50Hz PERFORMANCE

MODEL  
65x40-250

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.





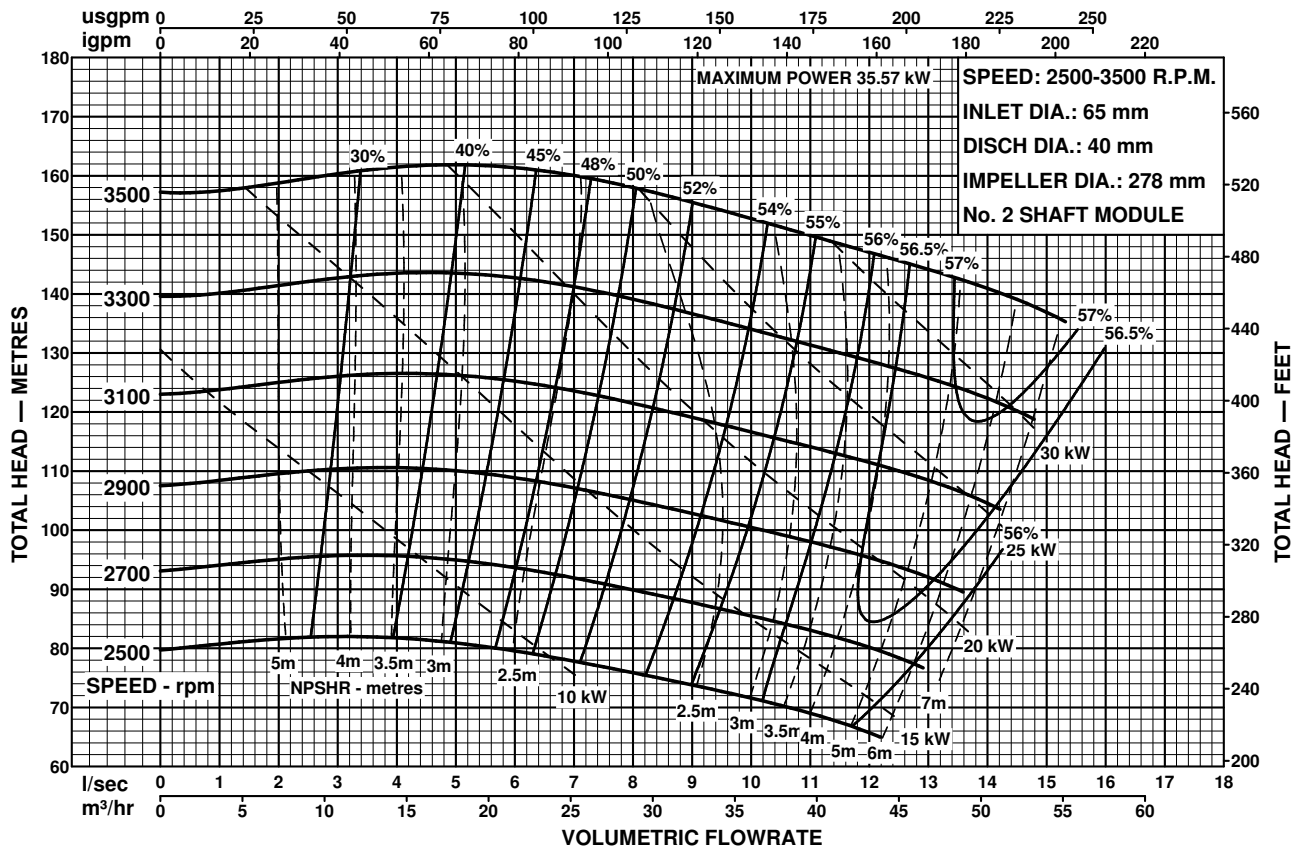
PENTAIR

ISO5199

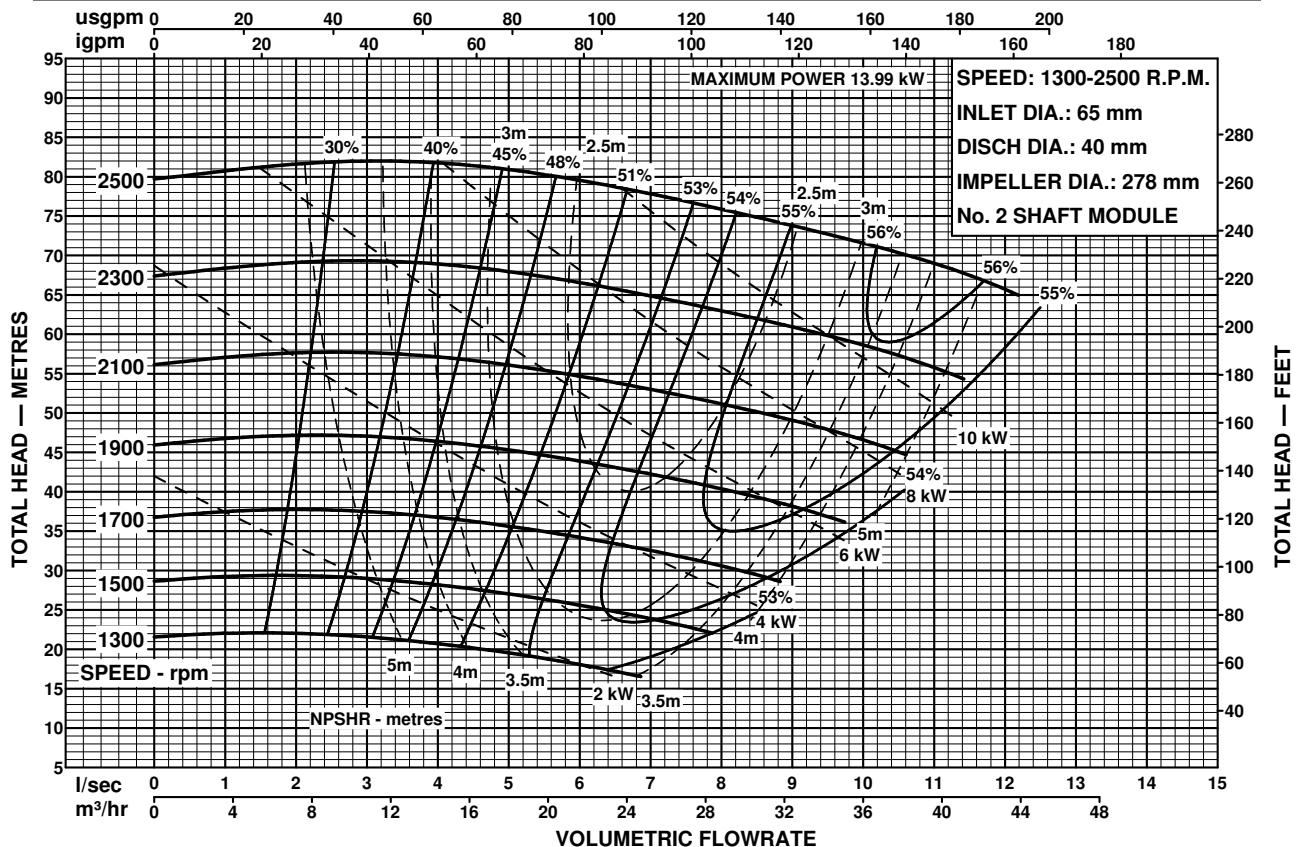
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**65x40-250**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.



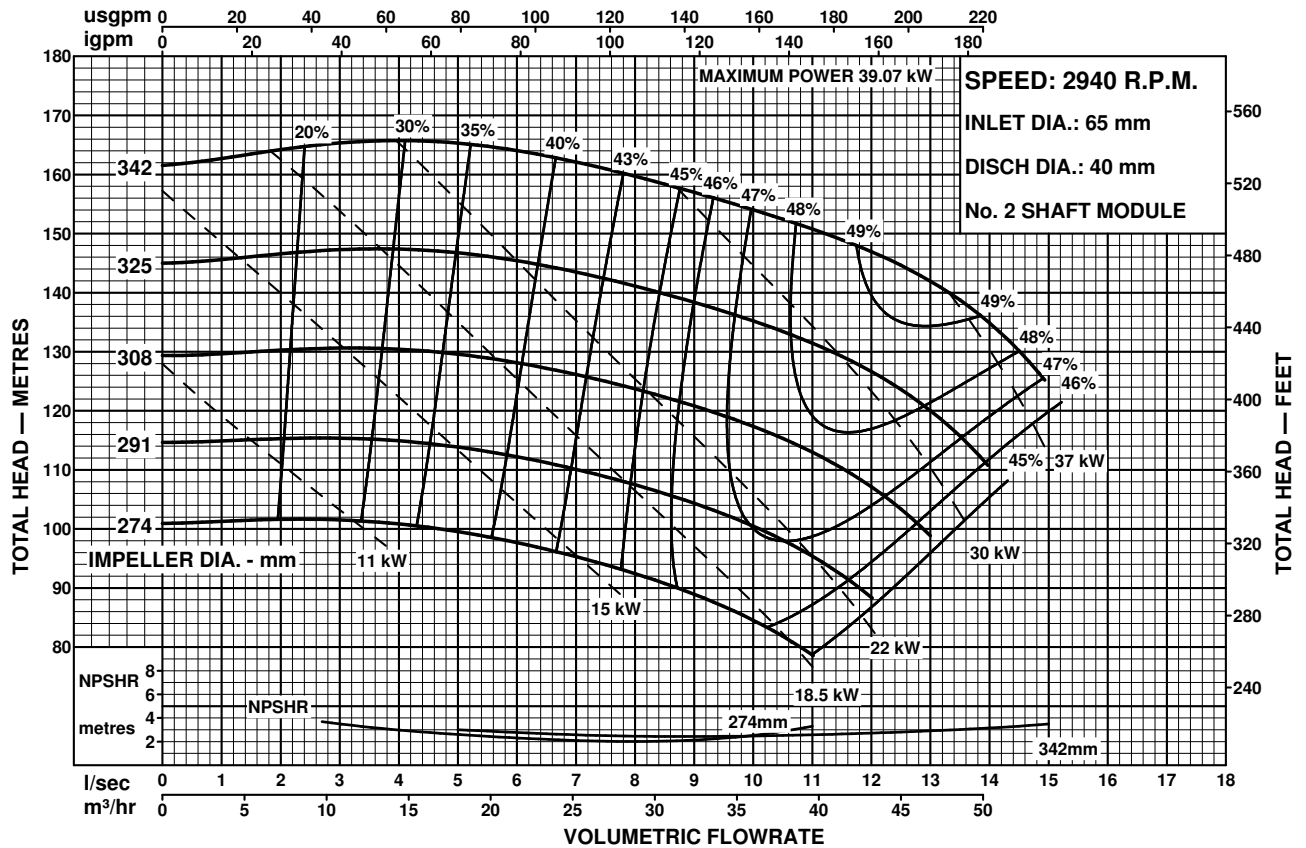


PENTAIR

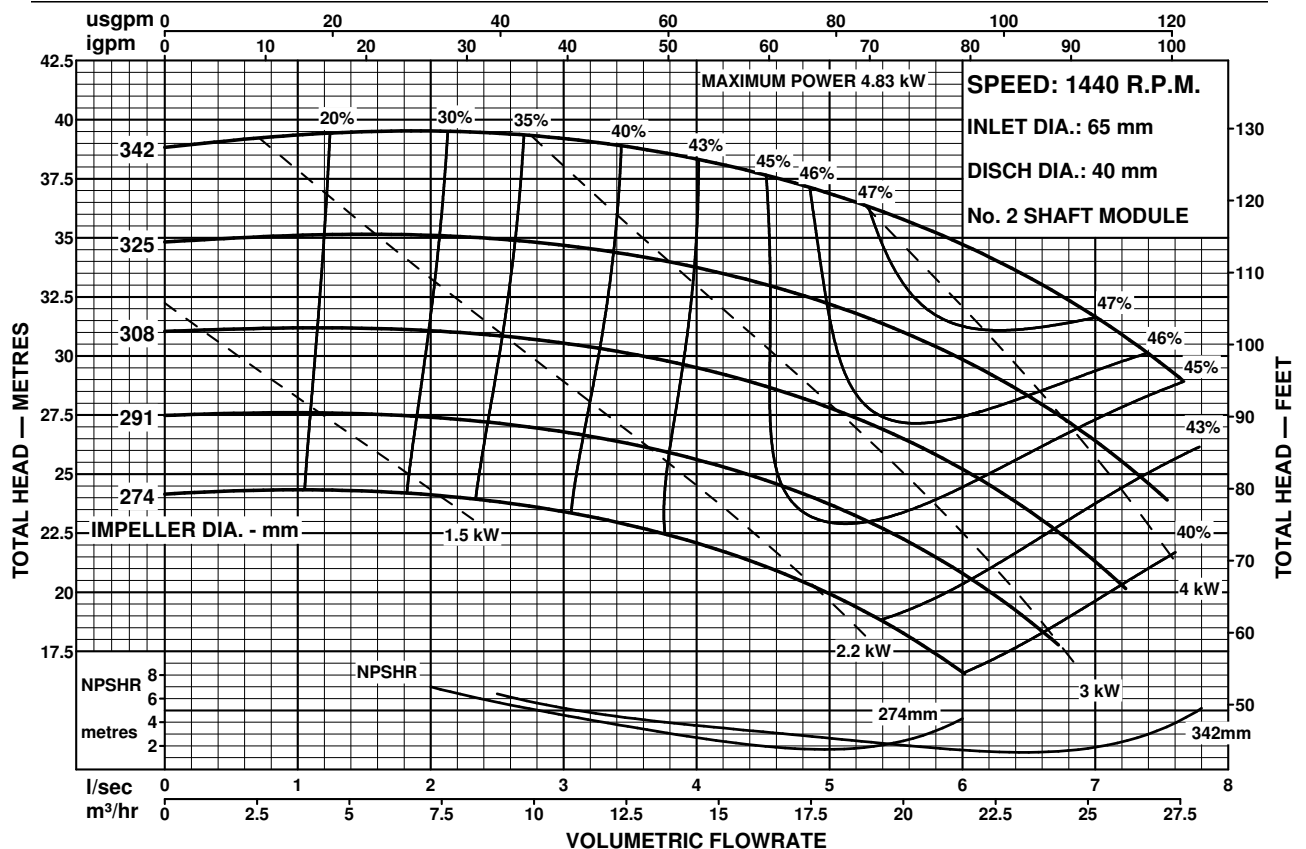
ISO5199  
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**65x40-315**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.







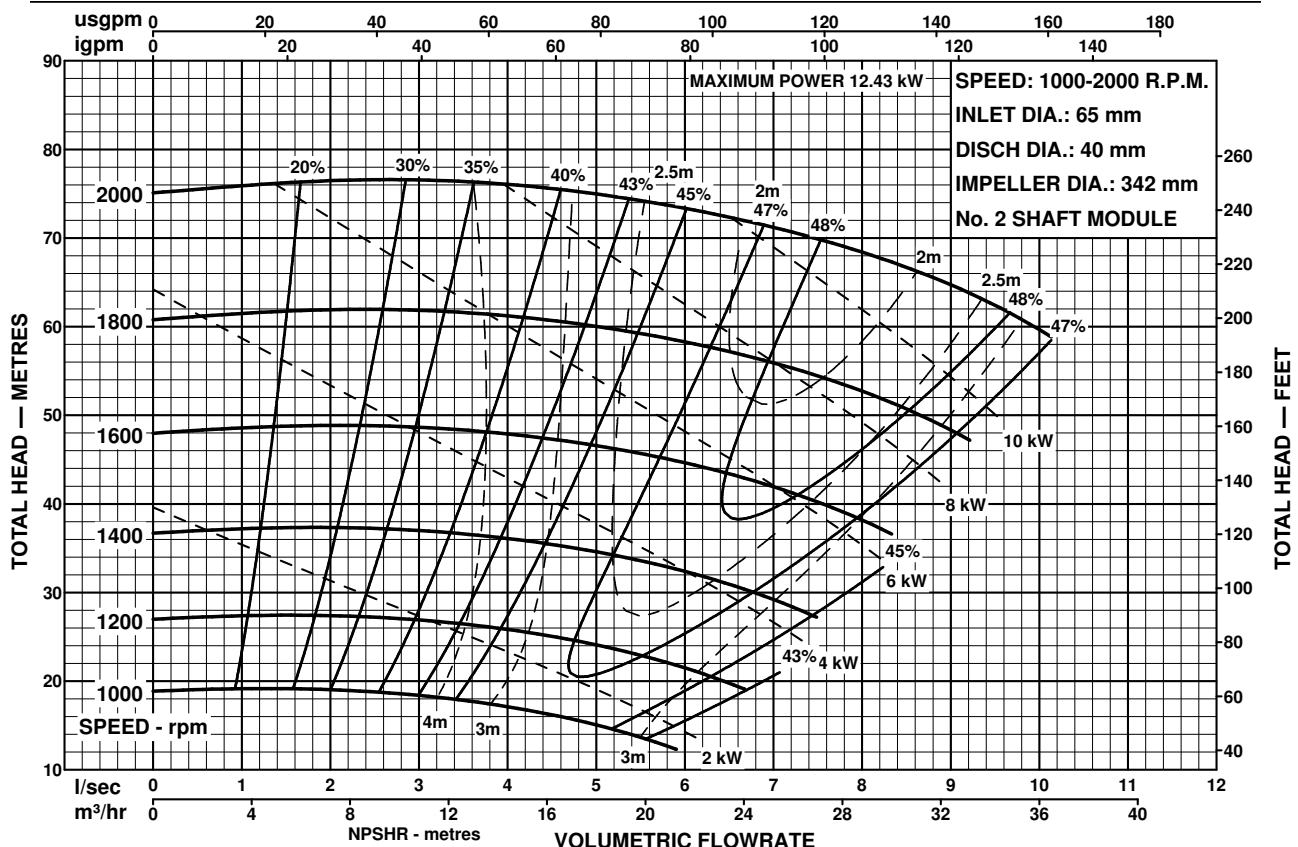
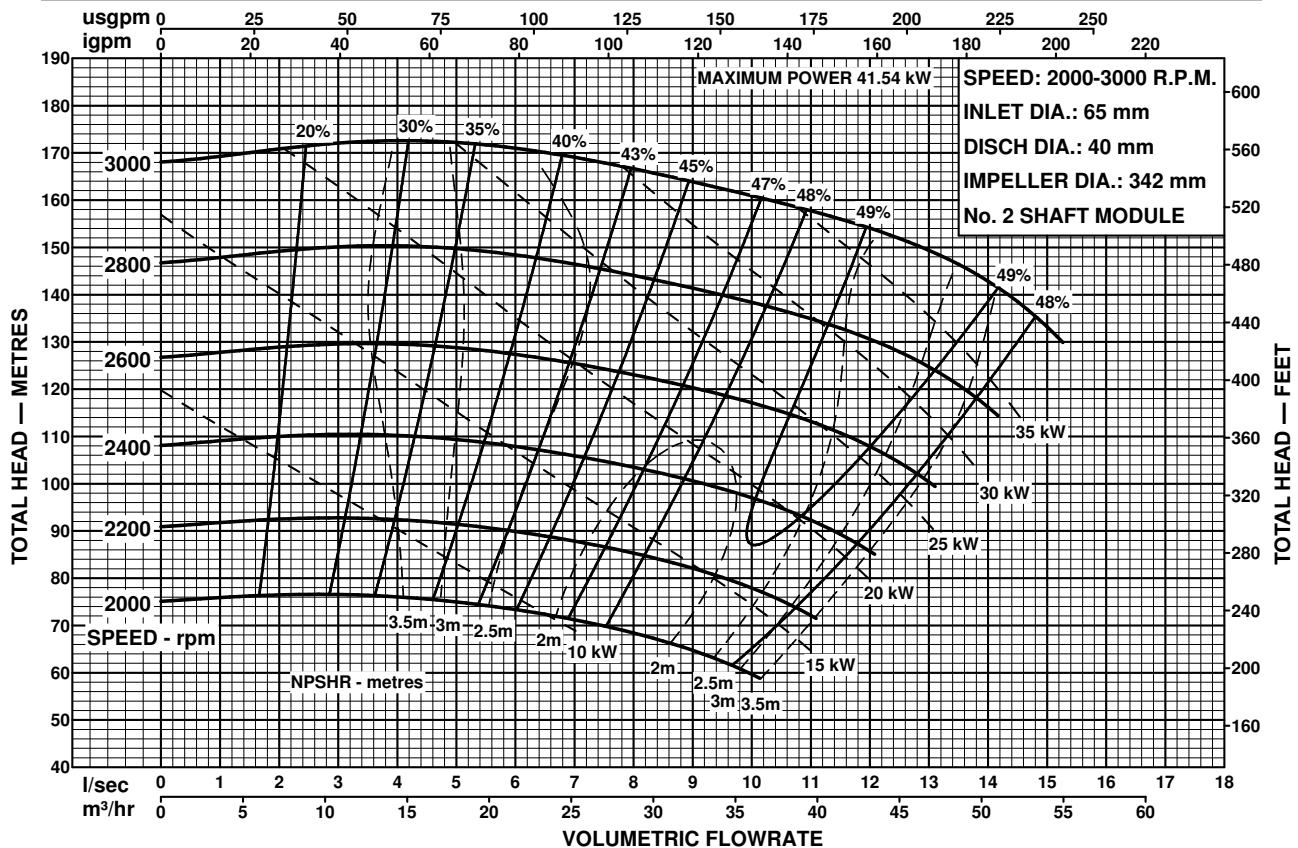
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**65x40-315**

CENTRIFUGAL PUMP PERFORMANCE DATA







PENTAIR

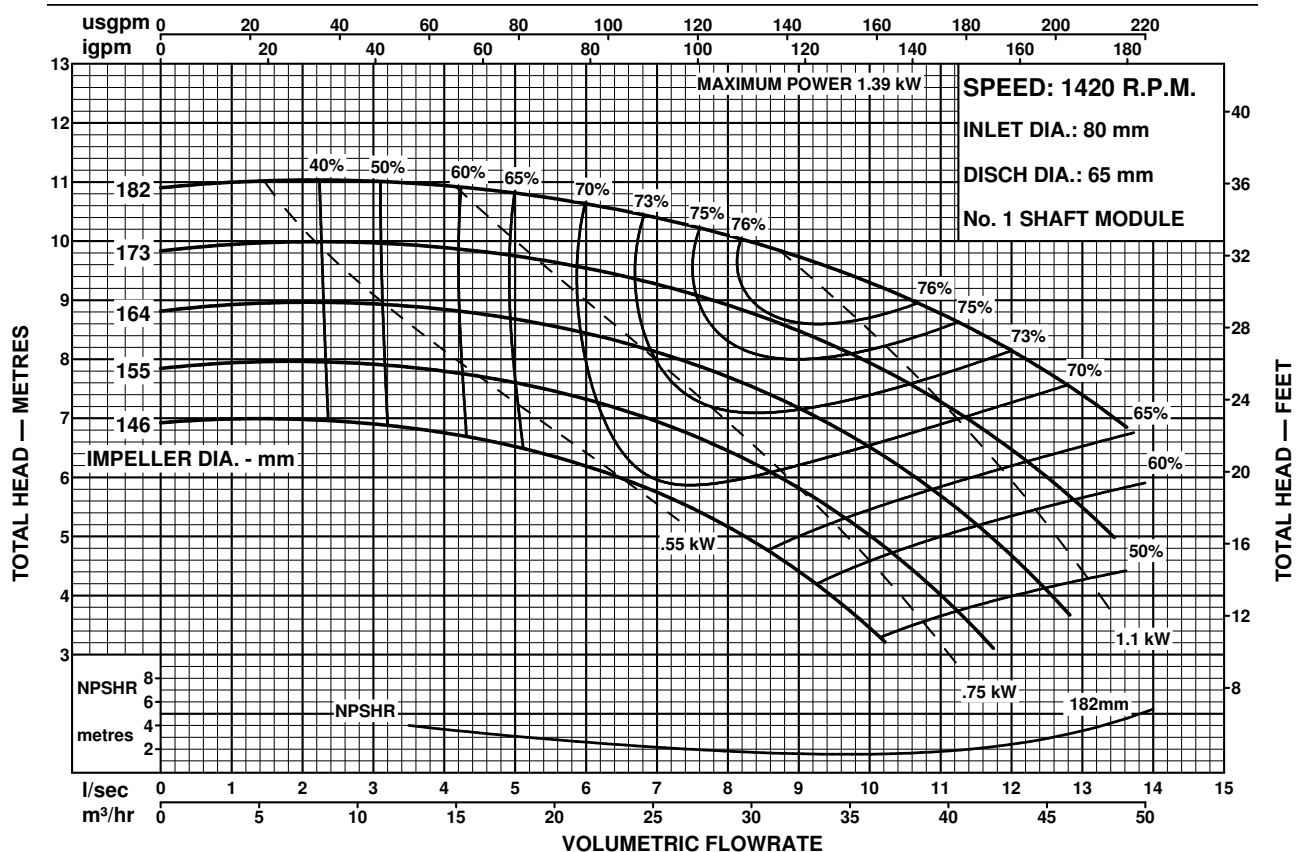
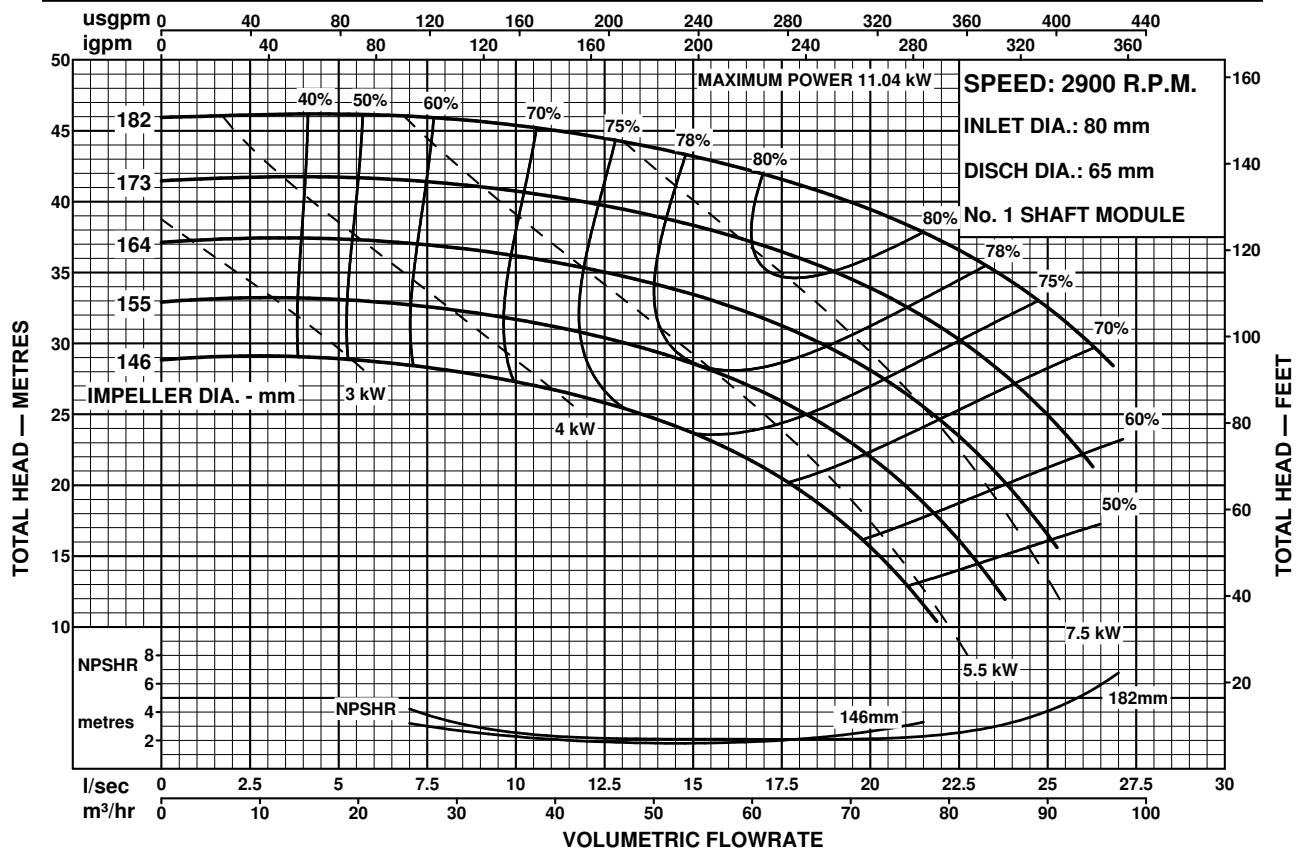
ISO5199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
80x65-160

CENTRIFUGAL PUMP PERFORMANCE DATA





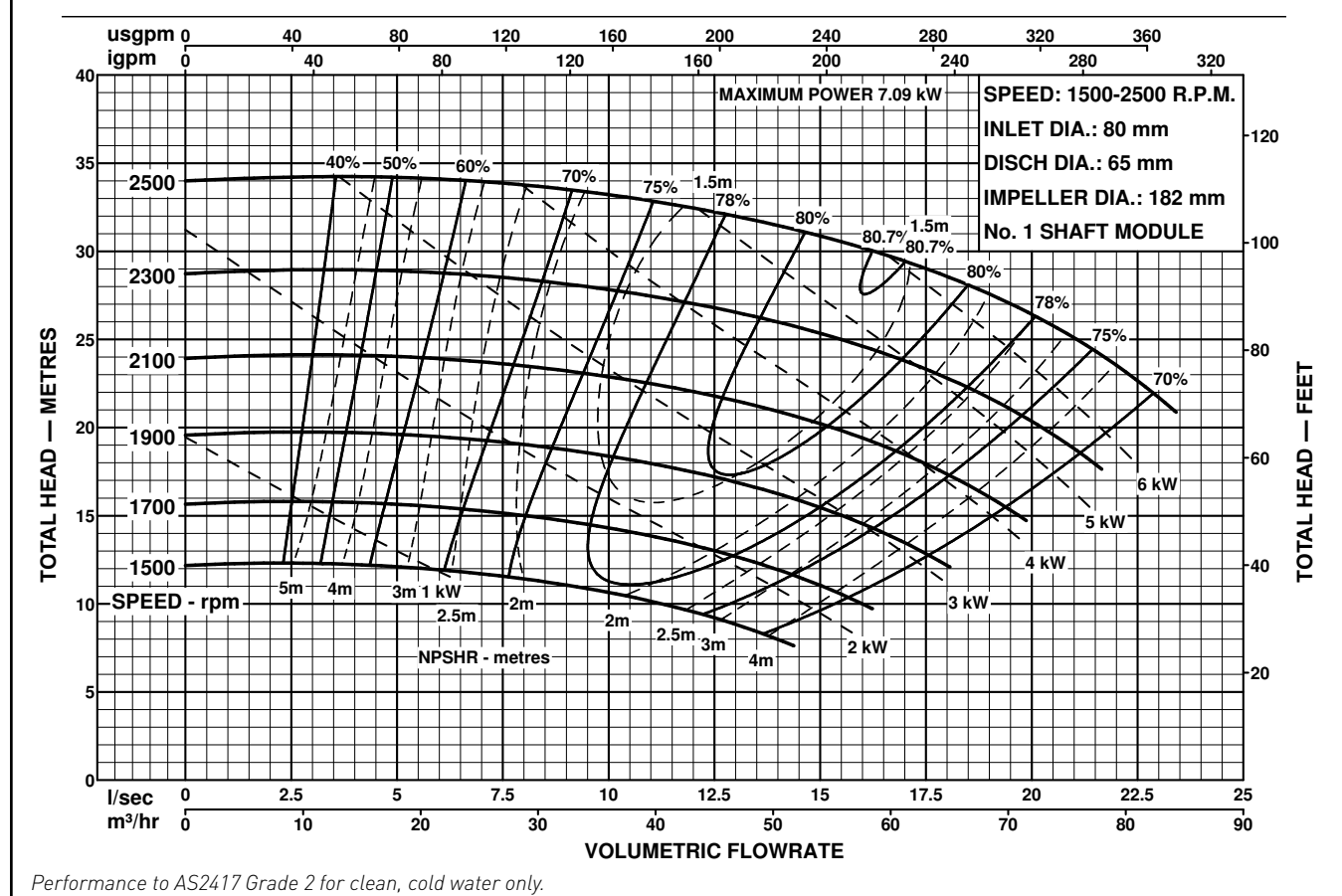
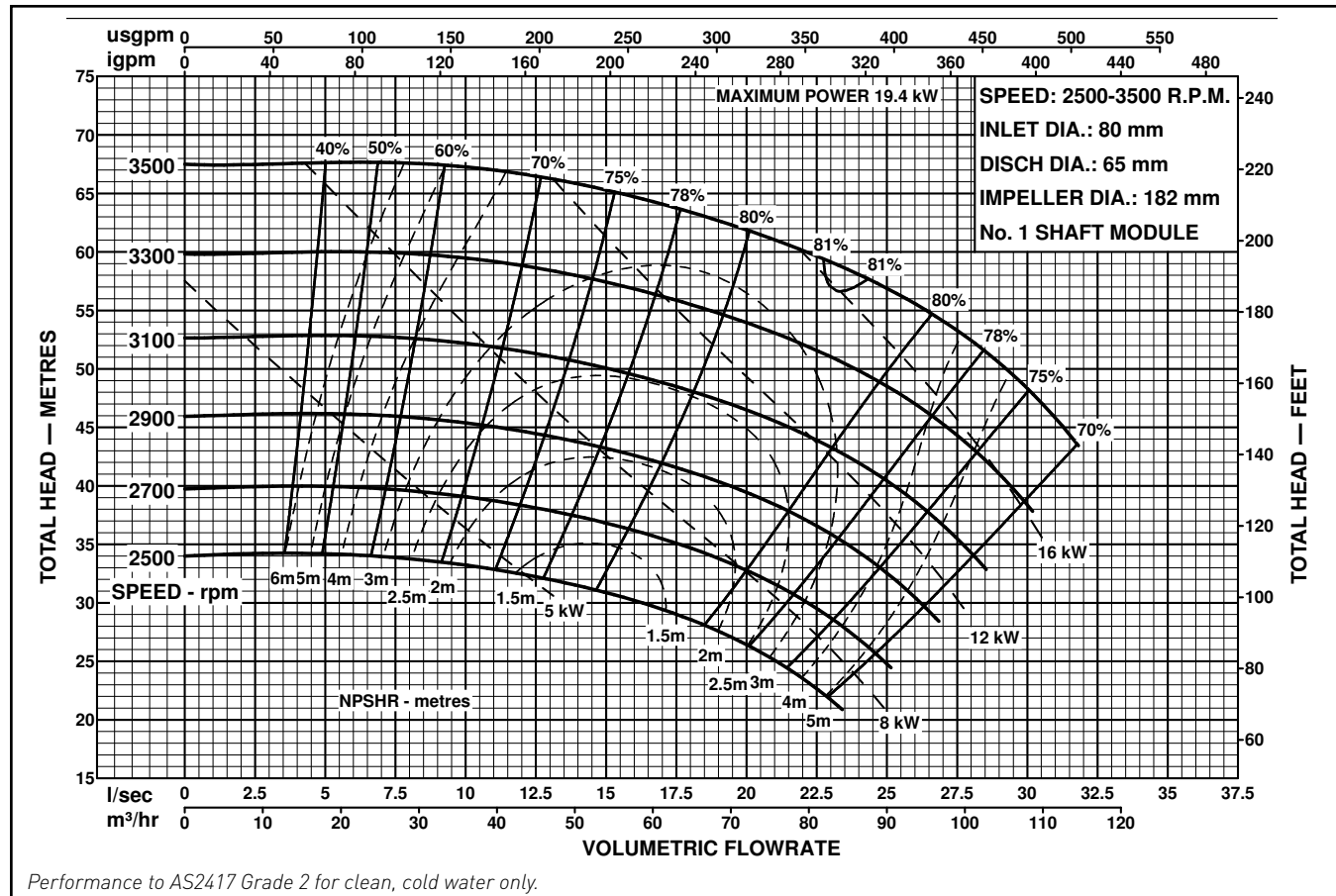
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**80x50-160**

CENTRIFUGAL PUMP PERFORMANCE DATA





**PENTAIR**

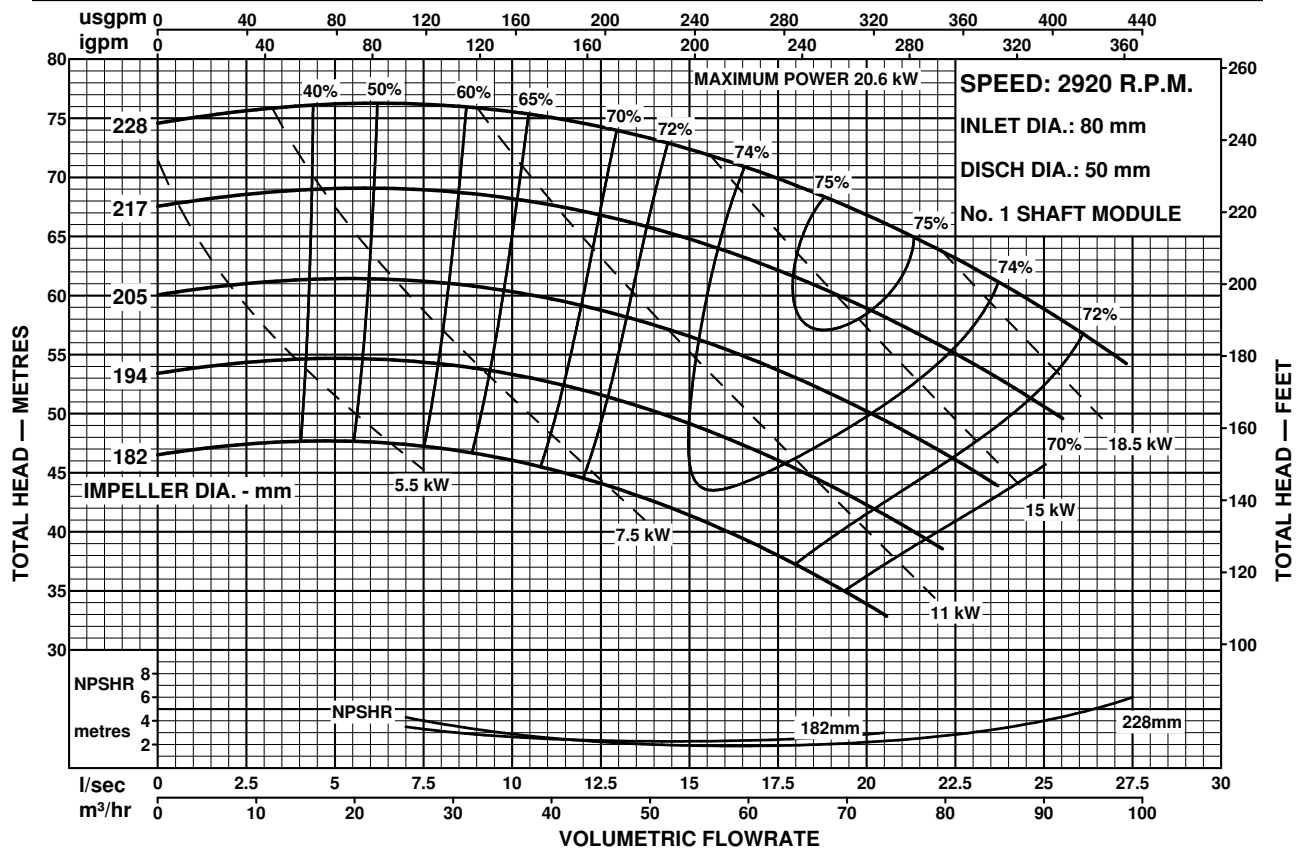
**ISO5199**

END SUCTION PUMPS

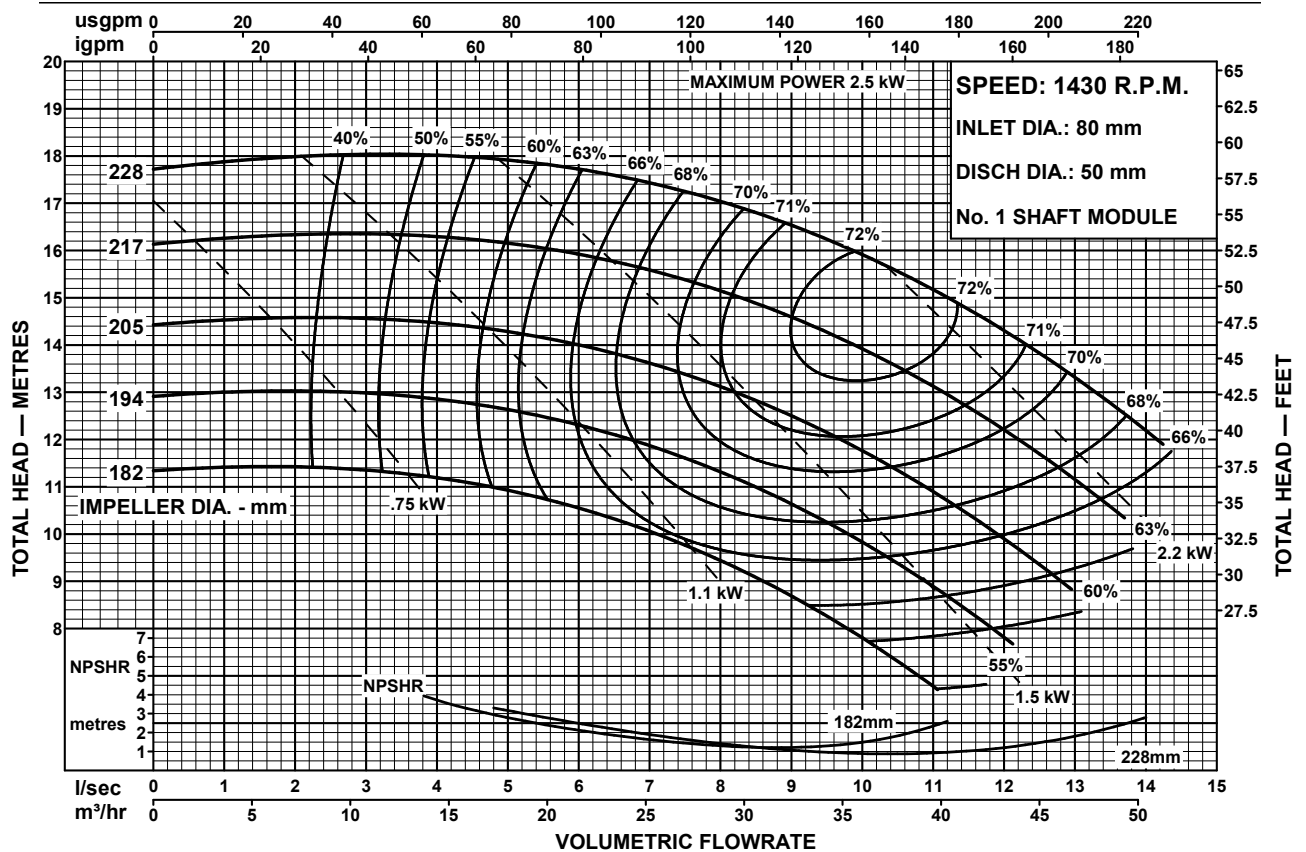
50Hz PERFORMANCE

MODEL  
**80x50-200**

**CENTRIFUGAL PUMP PERFORMANCE DATA**



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





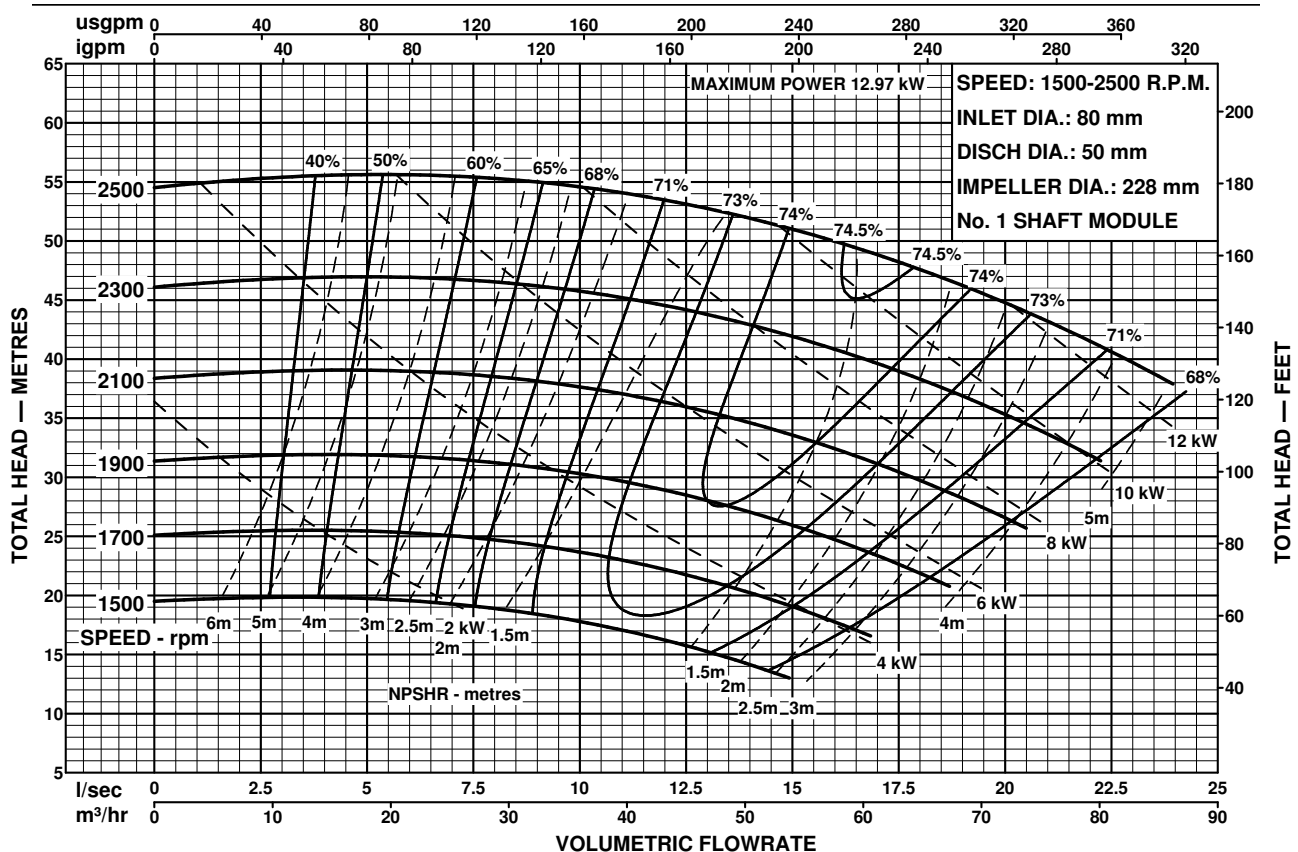
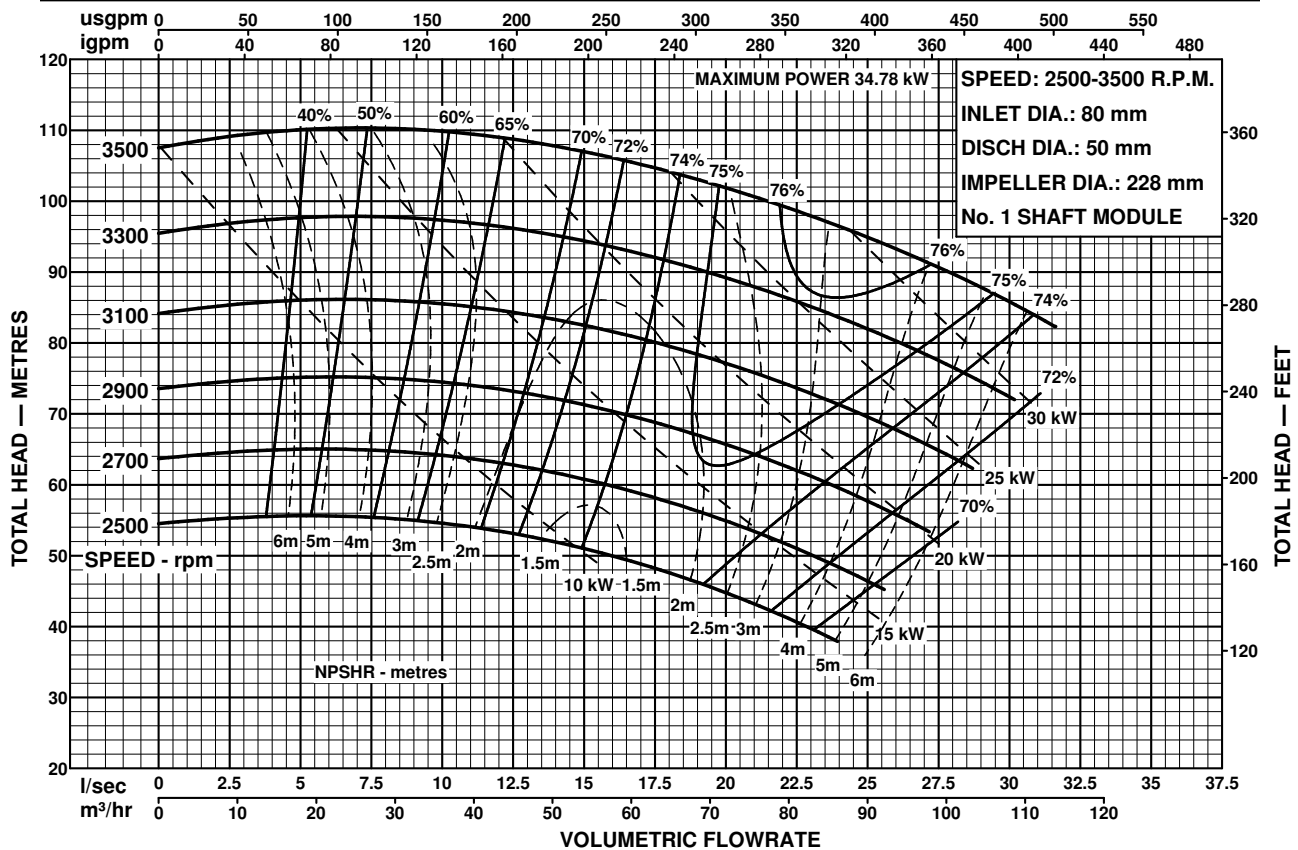
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**80x50-200**

CENTRIFUGAL PUMP PERFORMANCE DATA





PENTAIR

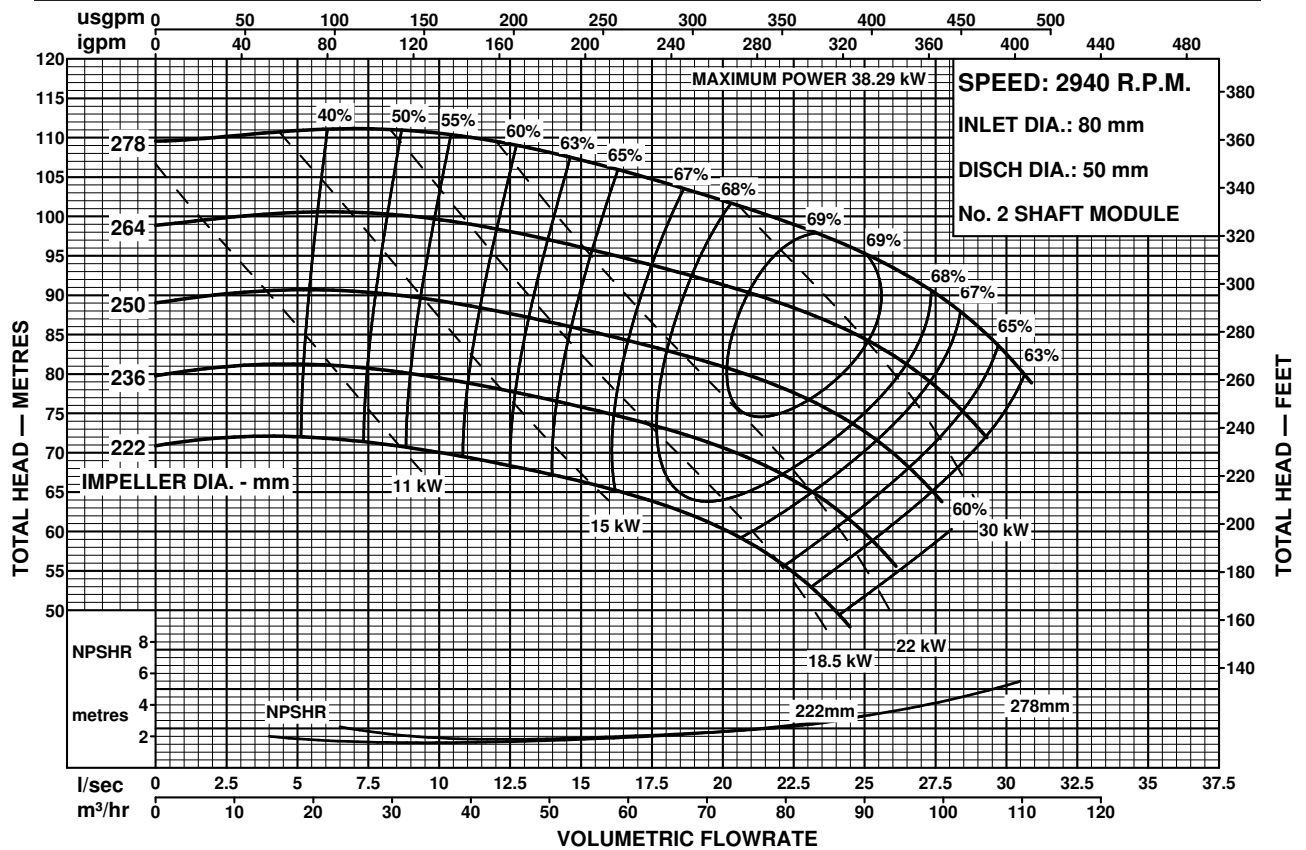
ISO5199

END SUCTION PUMPS

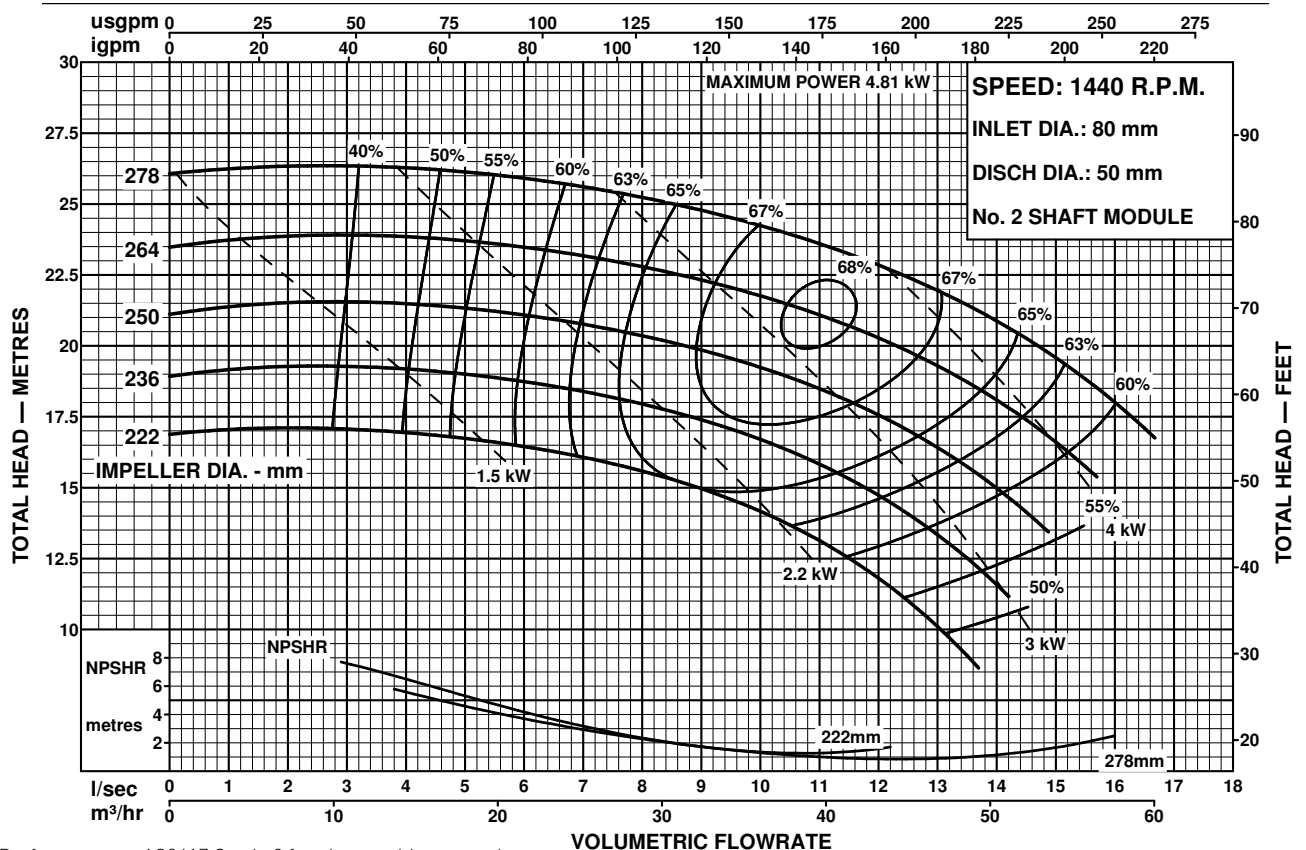
50Hz PERFORMANCE

MODEL  
80x50-250

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.







# PENTAIR

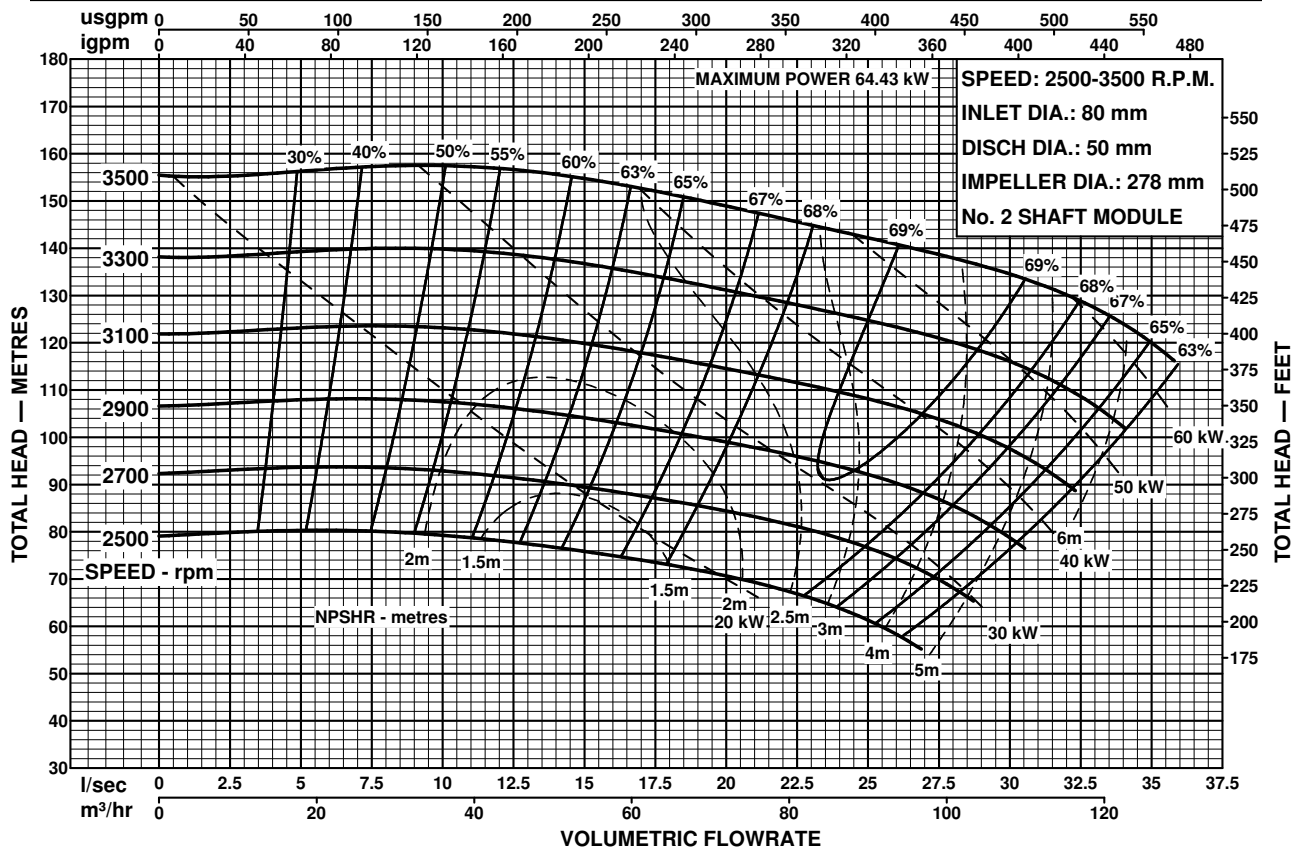
# ISO5199

END SUCTION PUMPS

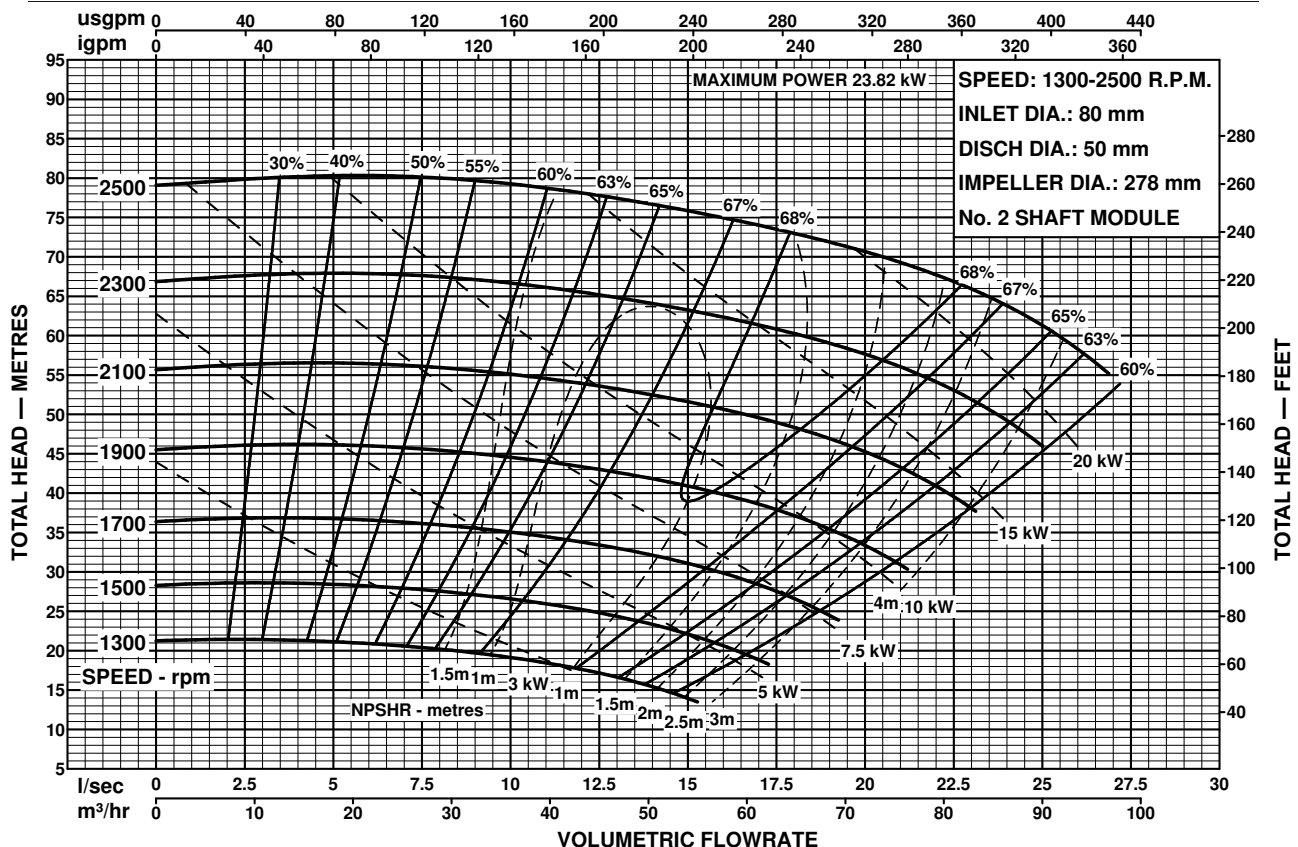
50Hz PERFORMANCE

MODEL  
**80x50-250**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.







PENTAIR

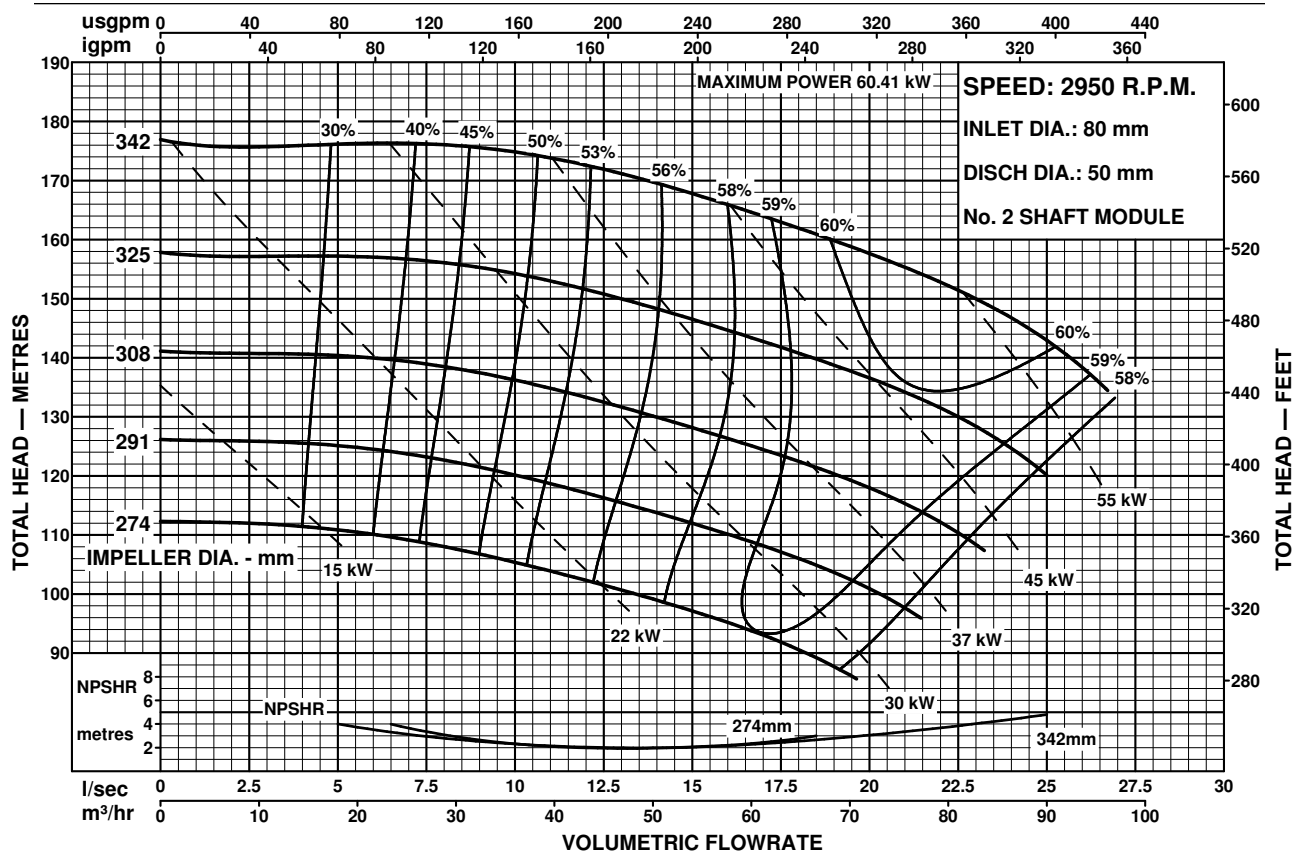
ISO5199

END SUCTION PUMPS

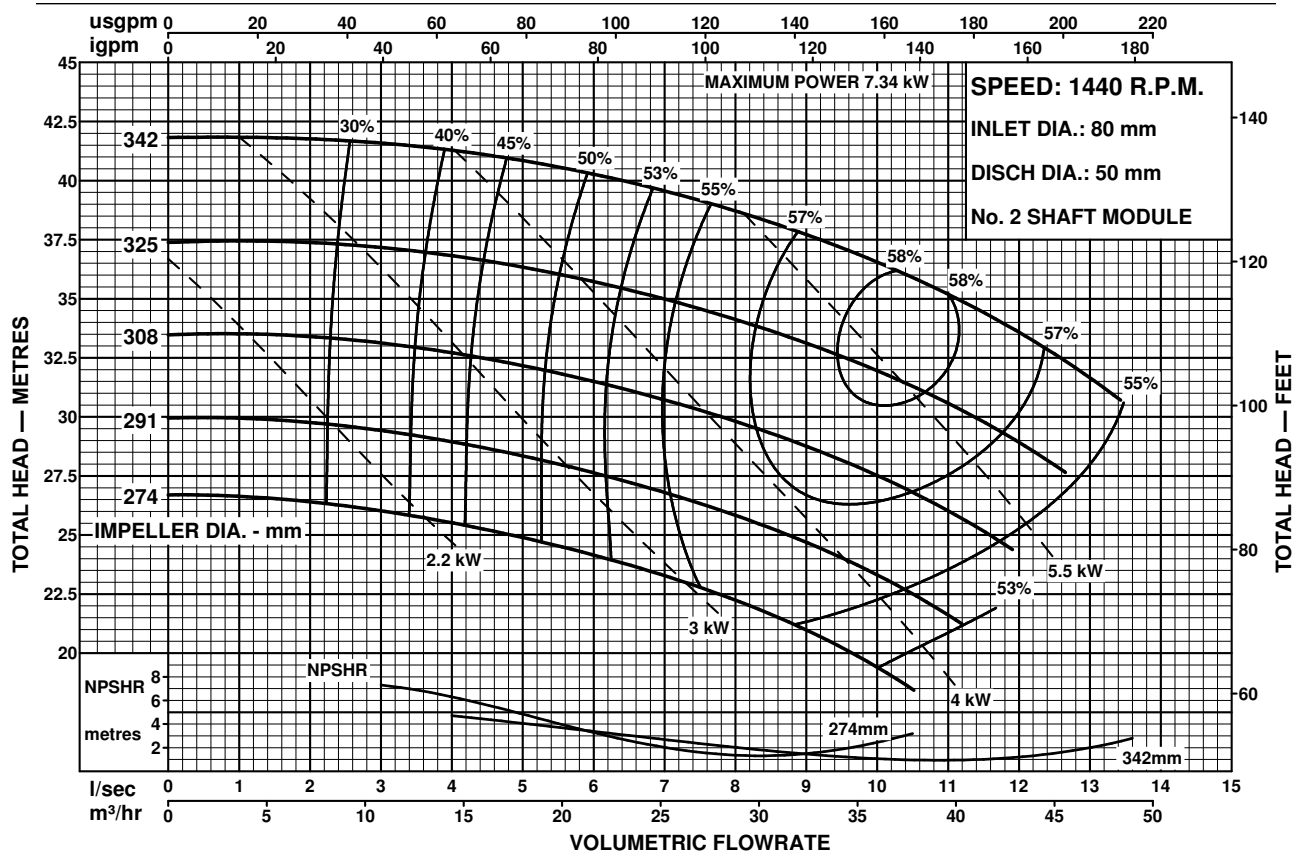
50Hz PERFORMANCE

MODEL  
80x50-315

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





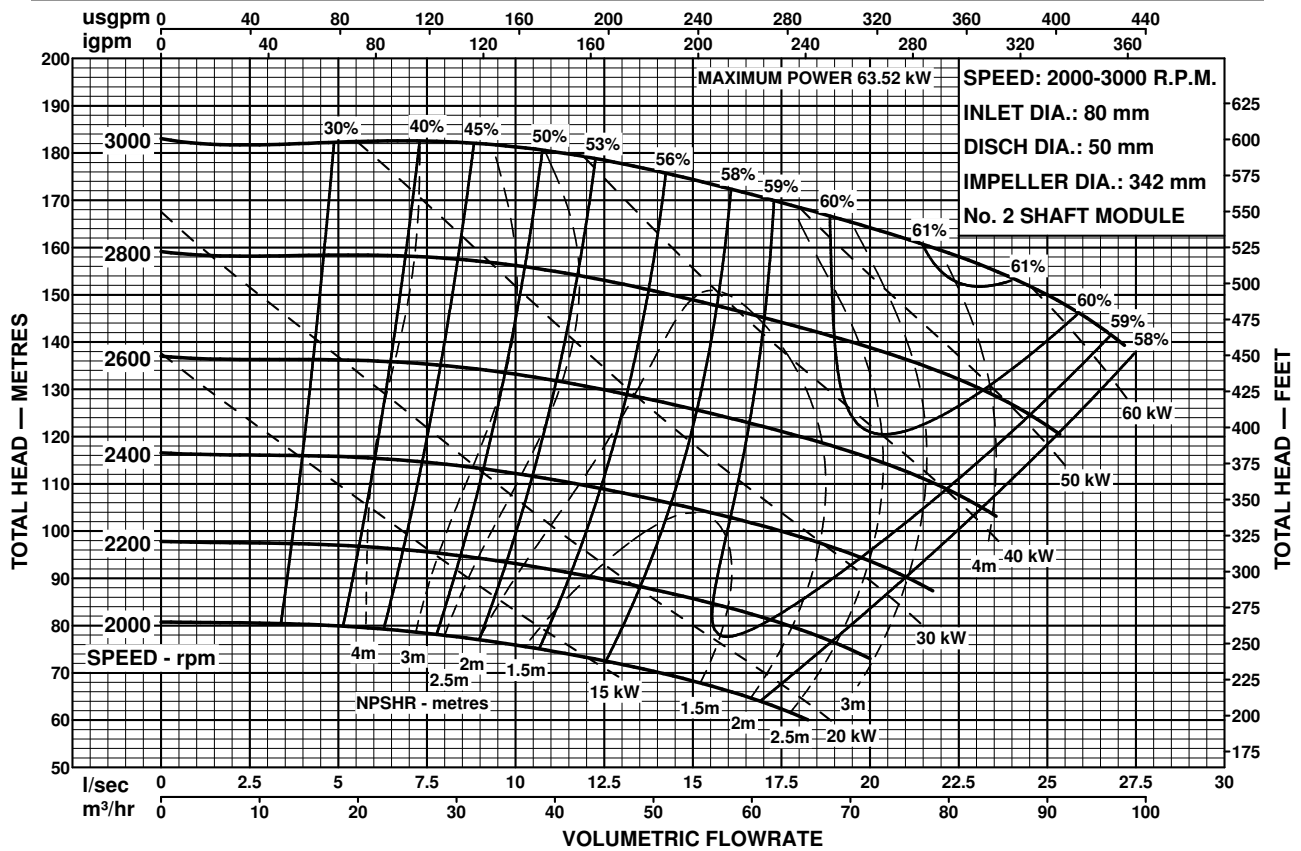
PENTAIR

ISO5199

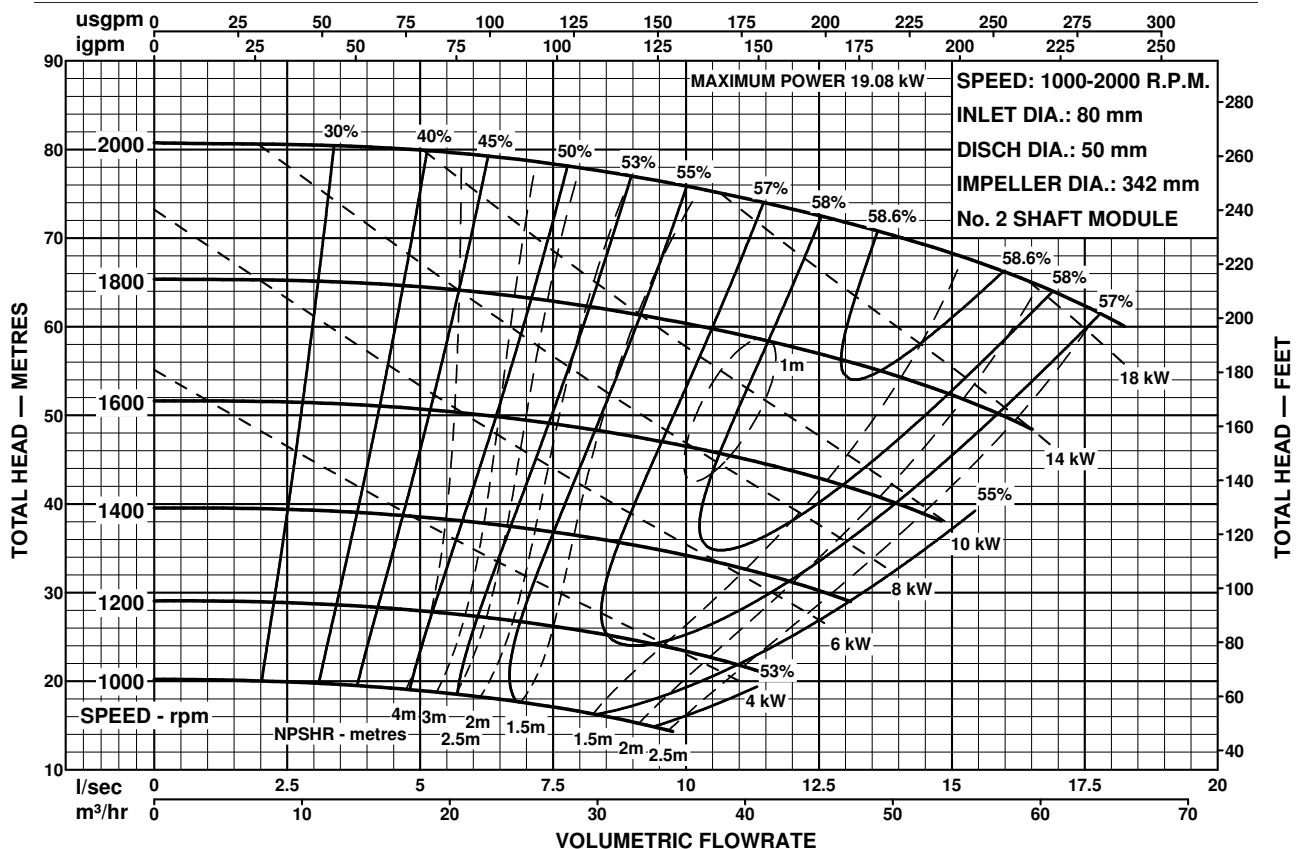
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**80x50-315**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

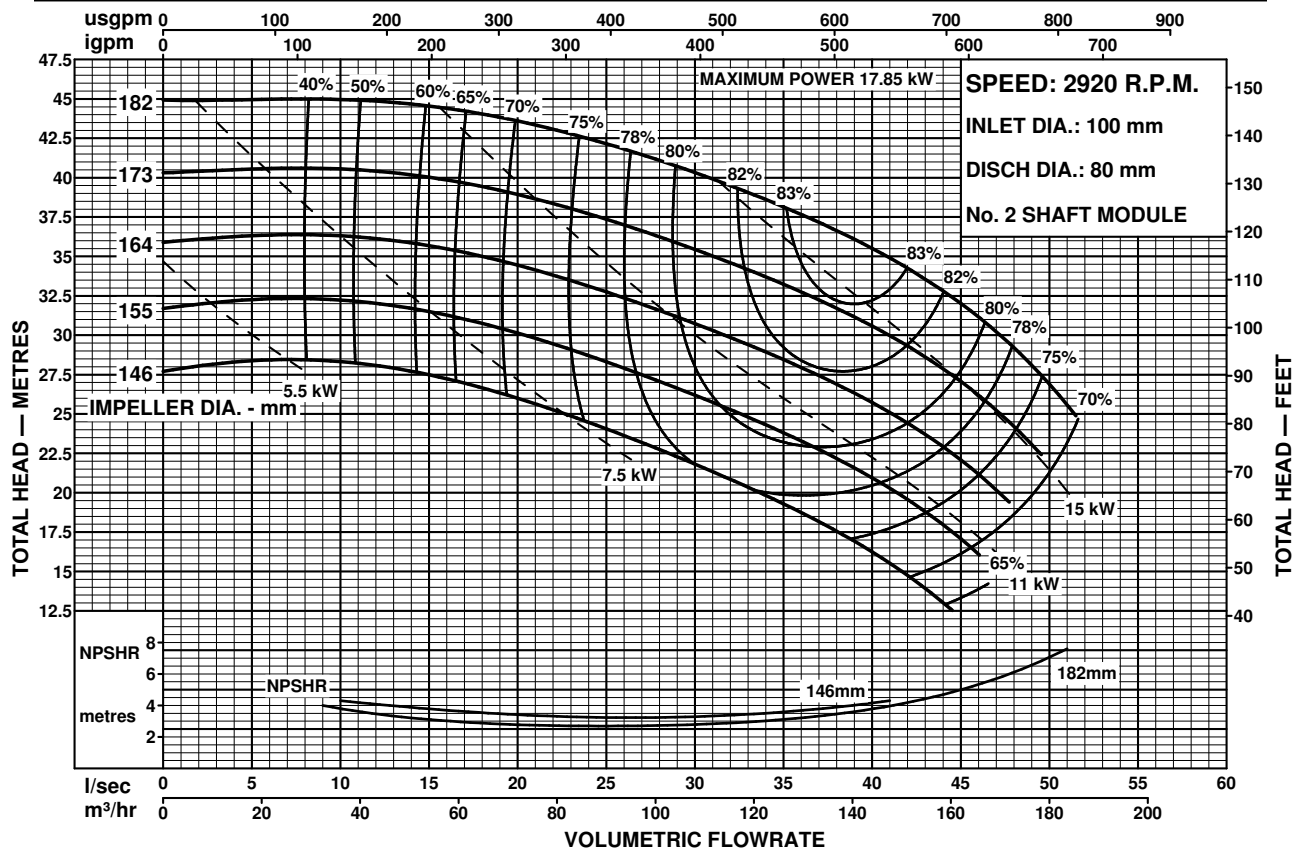
ISO5199

END SUCTION PUMPS

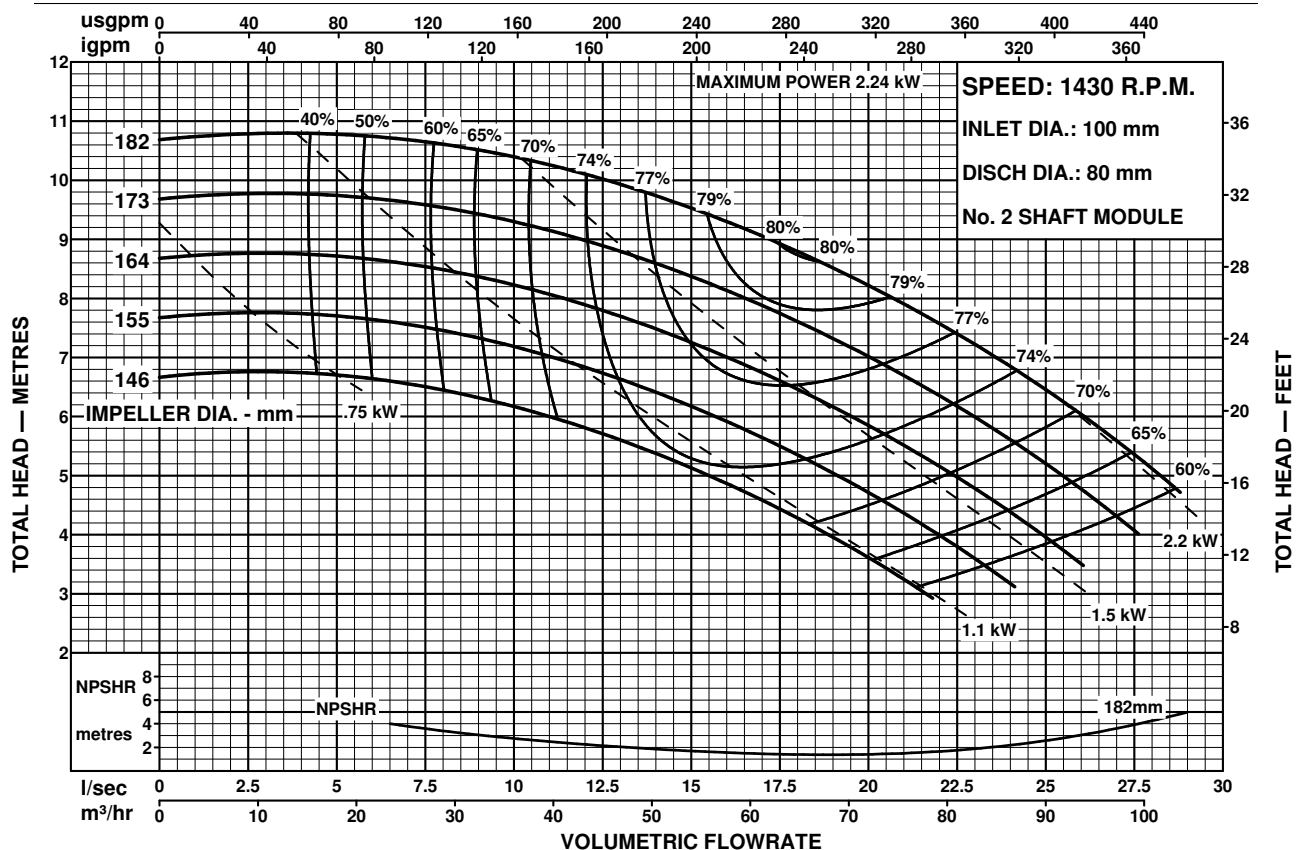
50Hz PERFORMANCE

MODEL  
100x80-160

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

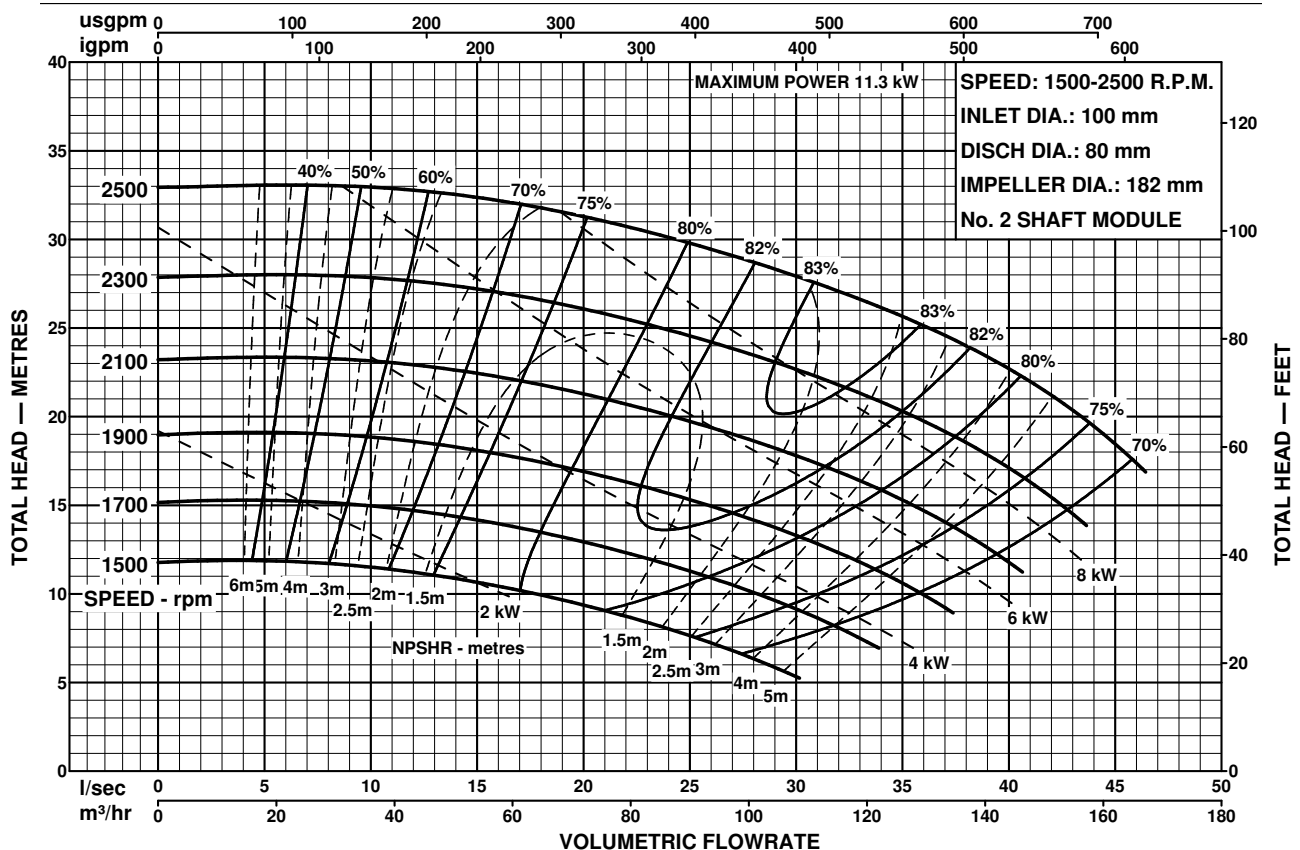
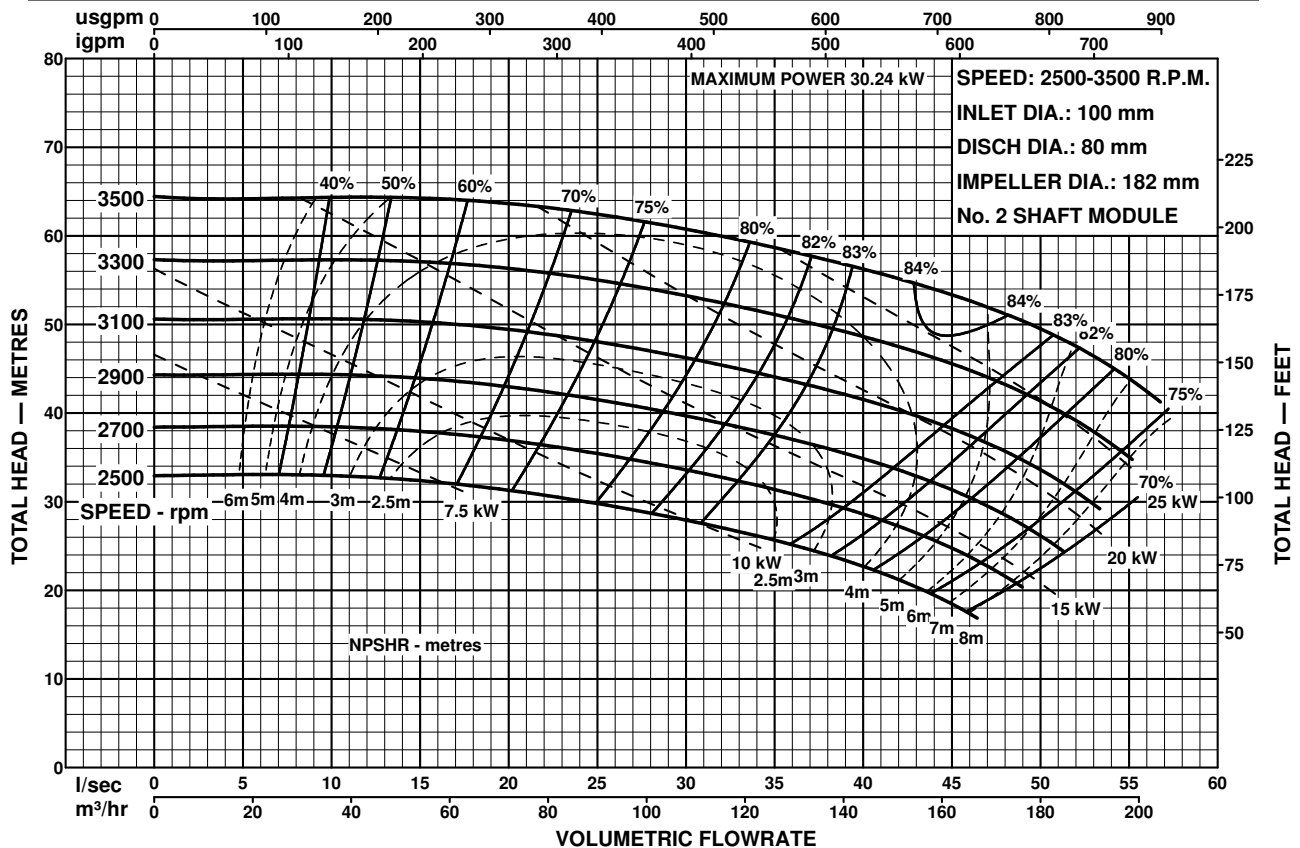
ISO5199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
100x80-160

CENTRIFUGAL PUMP PERFORMANCE DATA





PENTAIR

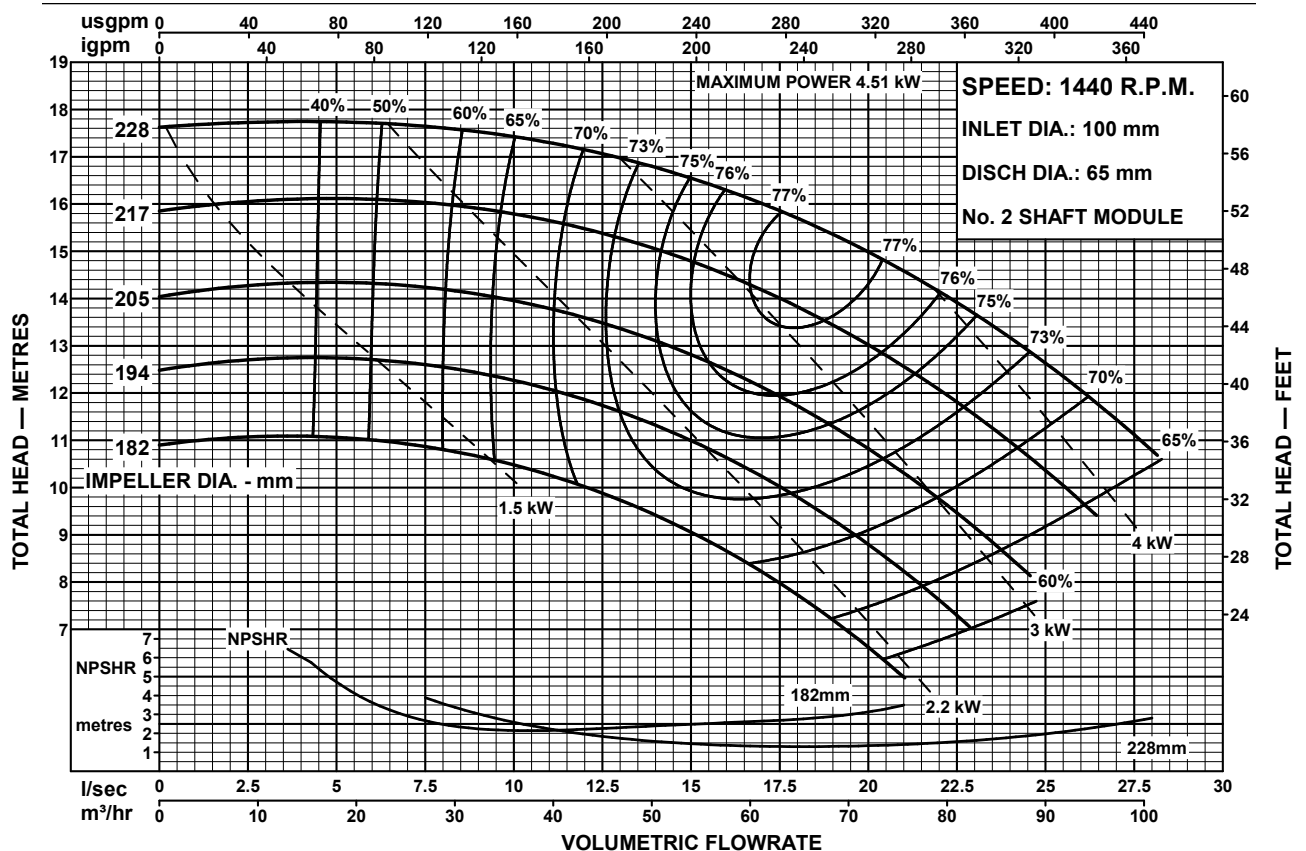
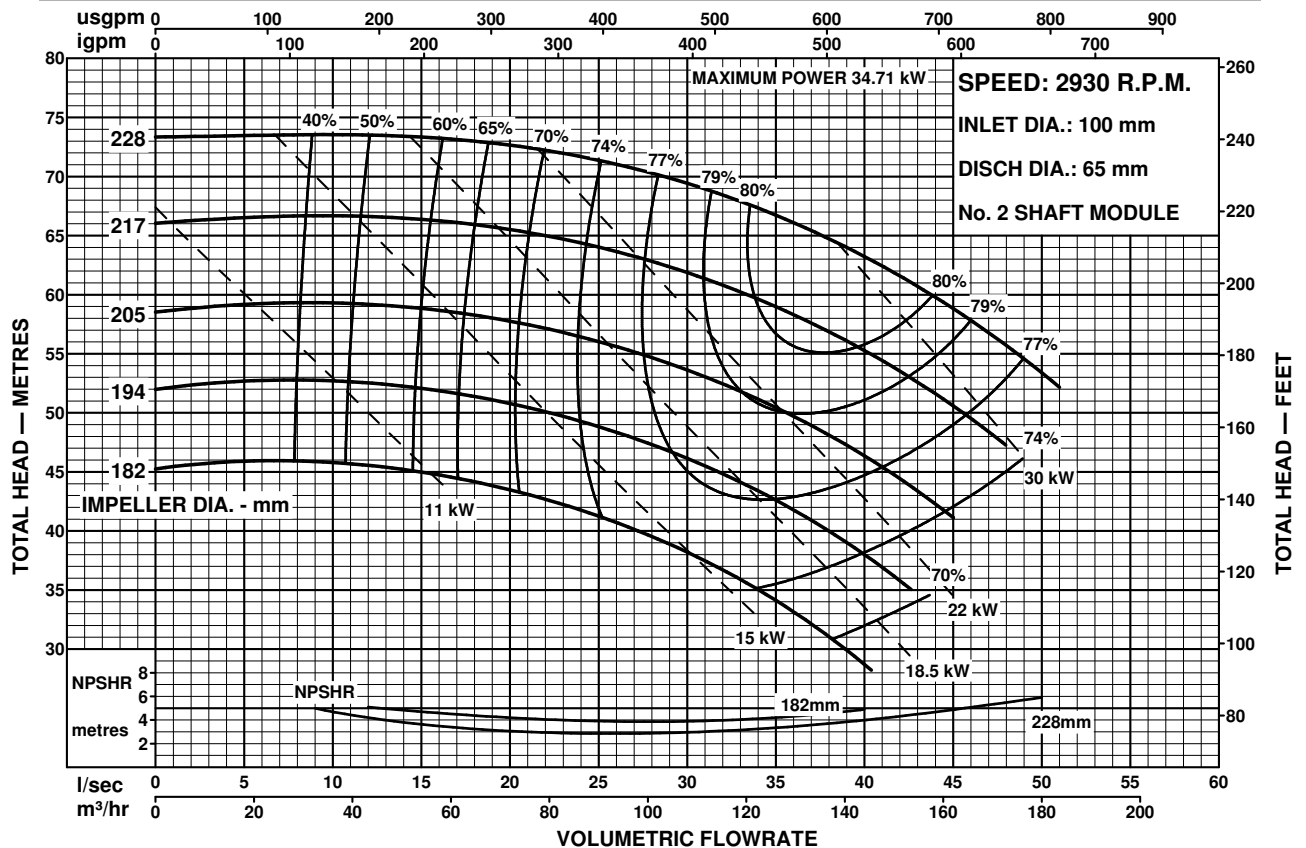
ISO5199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
100x65-200

CENTRIFUGAL PUMP PERFORMANCE DATA







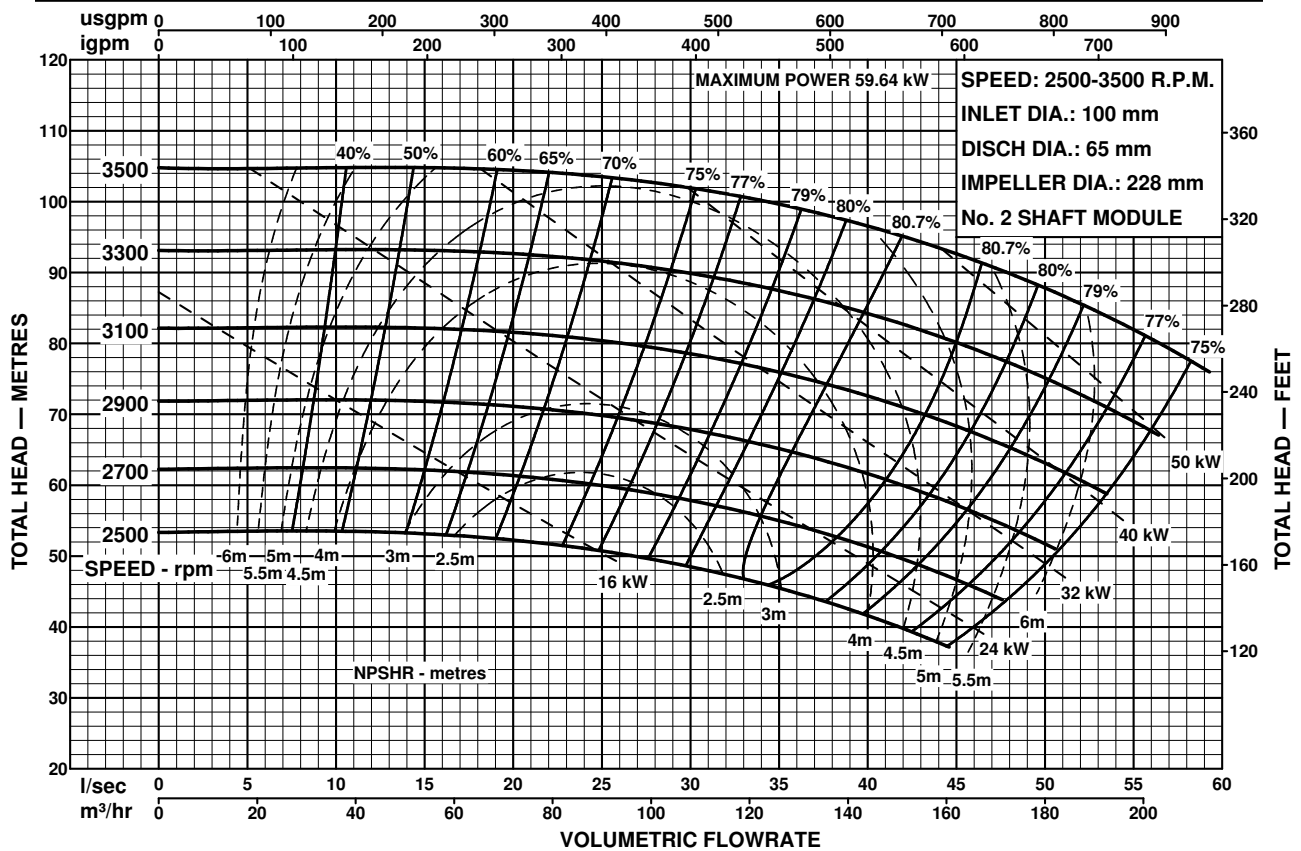
PENTAIR

ISO5199

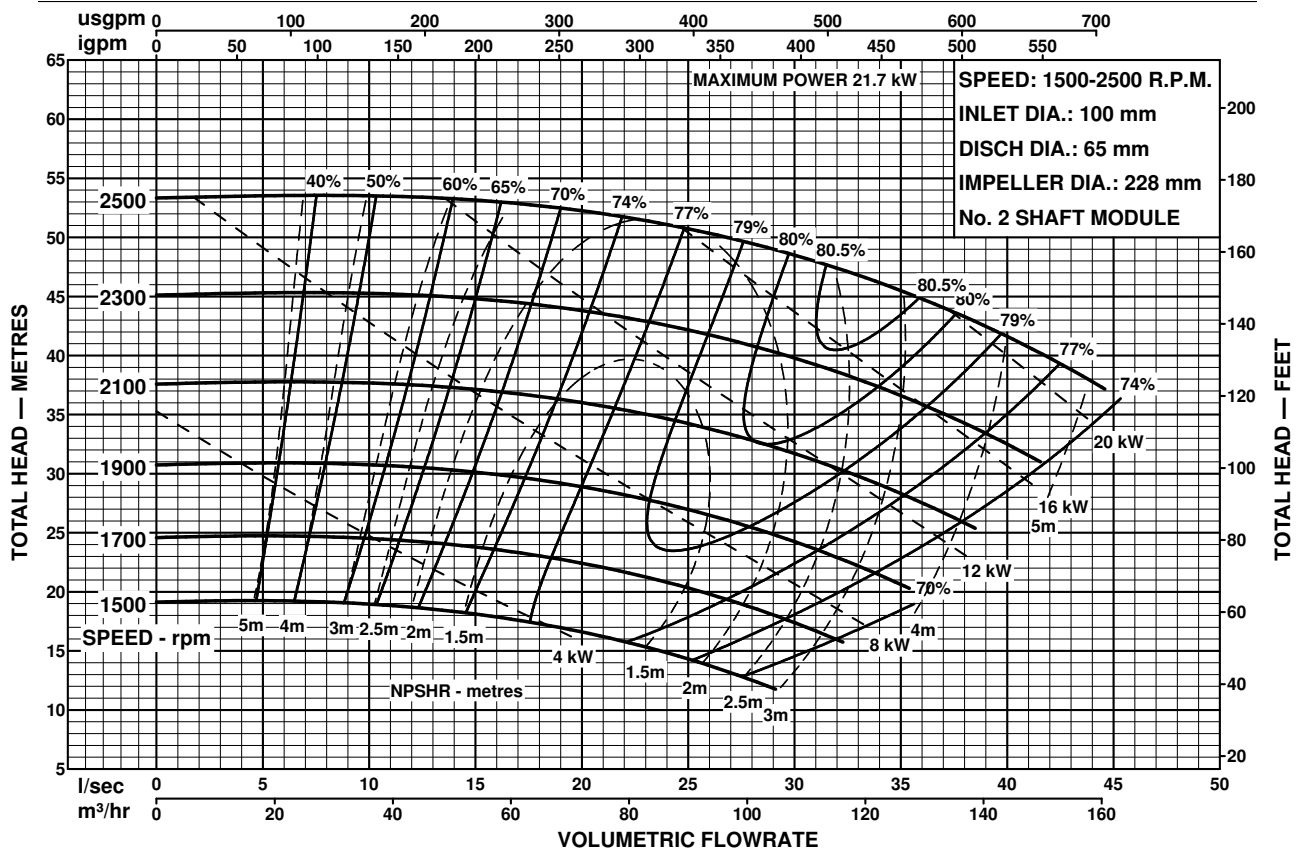
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**100x65-200**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.







PENTAIR

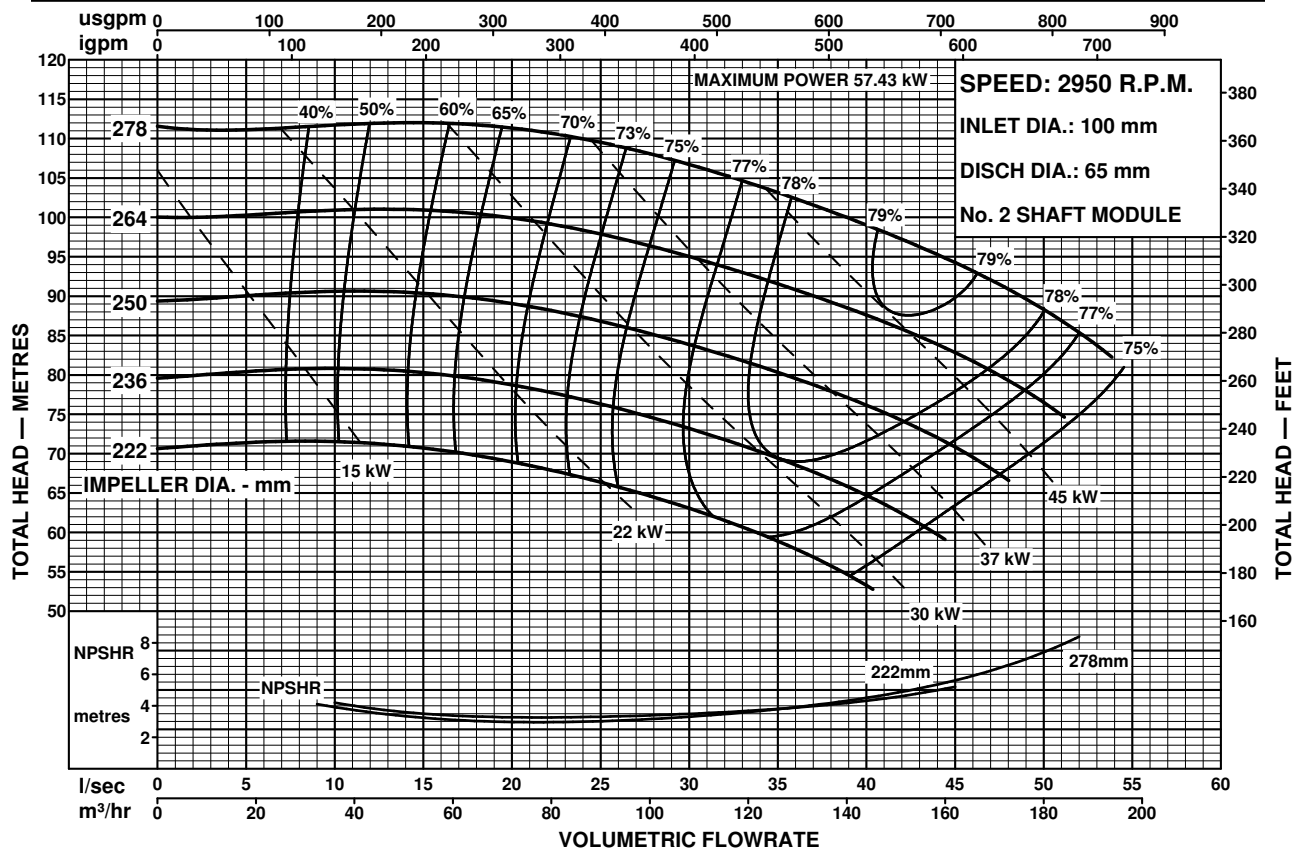
ISO5199

END SUCTION PUMPS

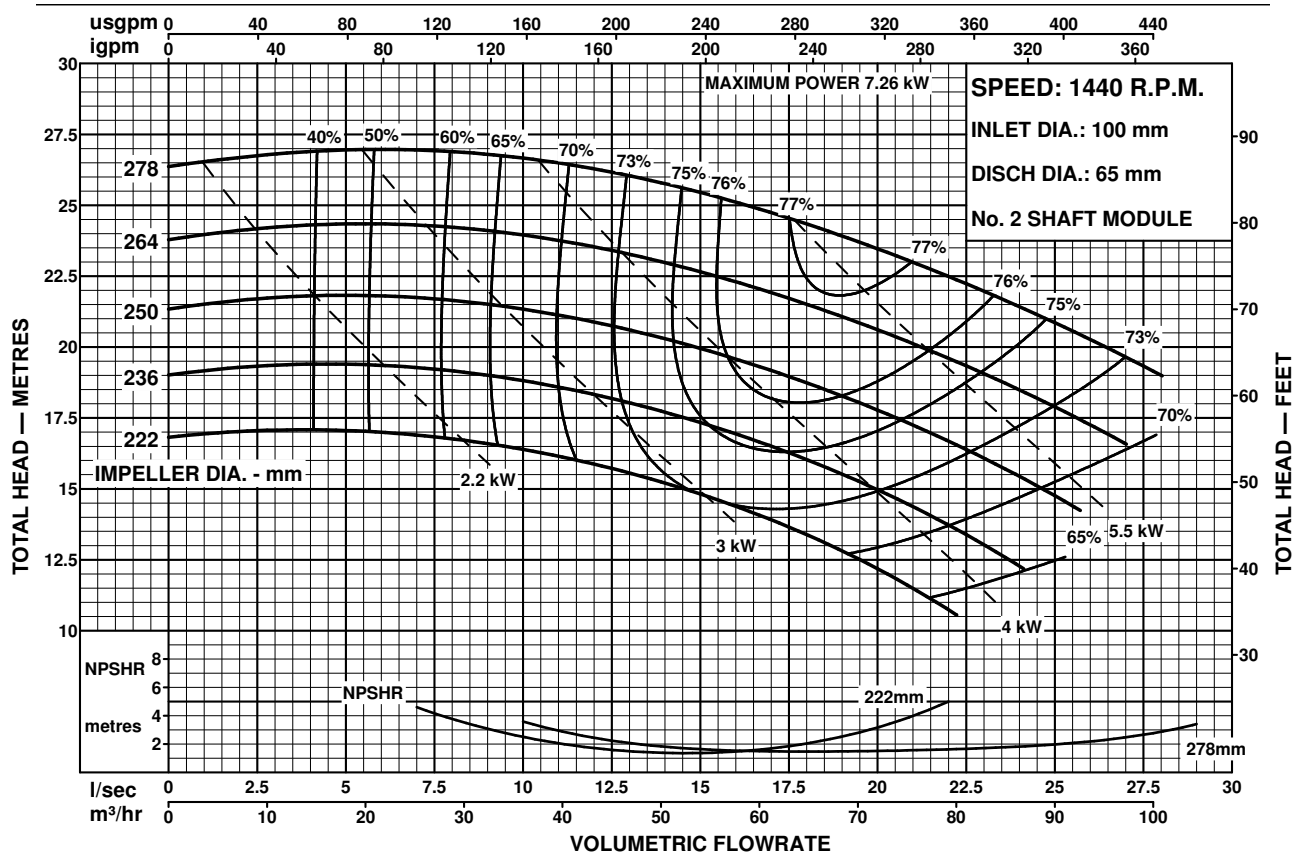
50Hz PERFORMANCE

MODEL  
100x65-250

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

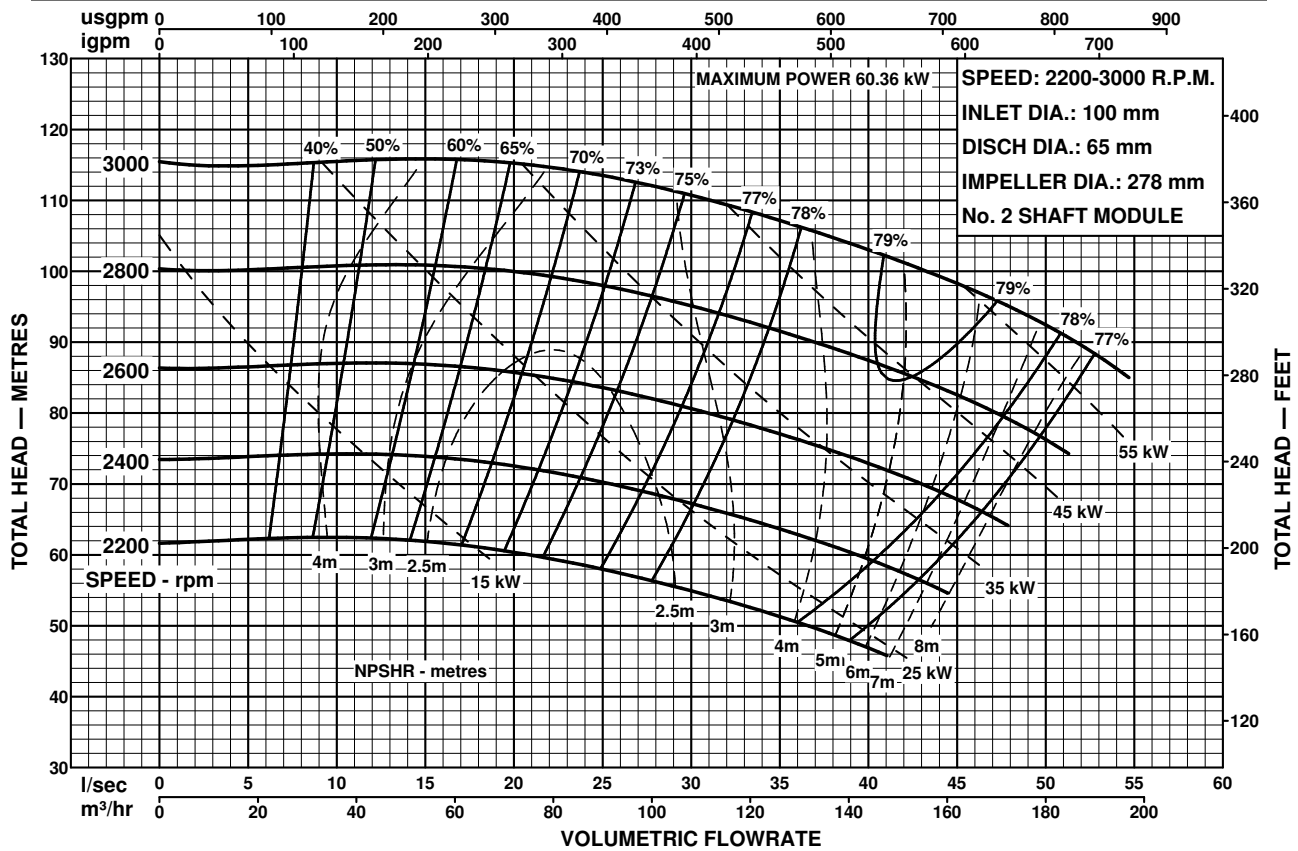
ISO5199

END SUCTION PUMPS

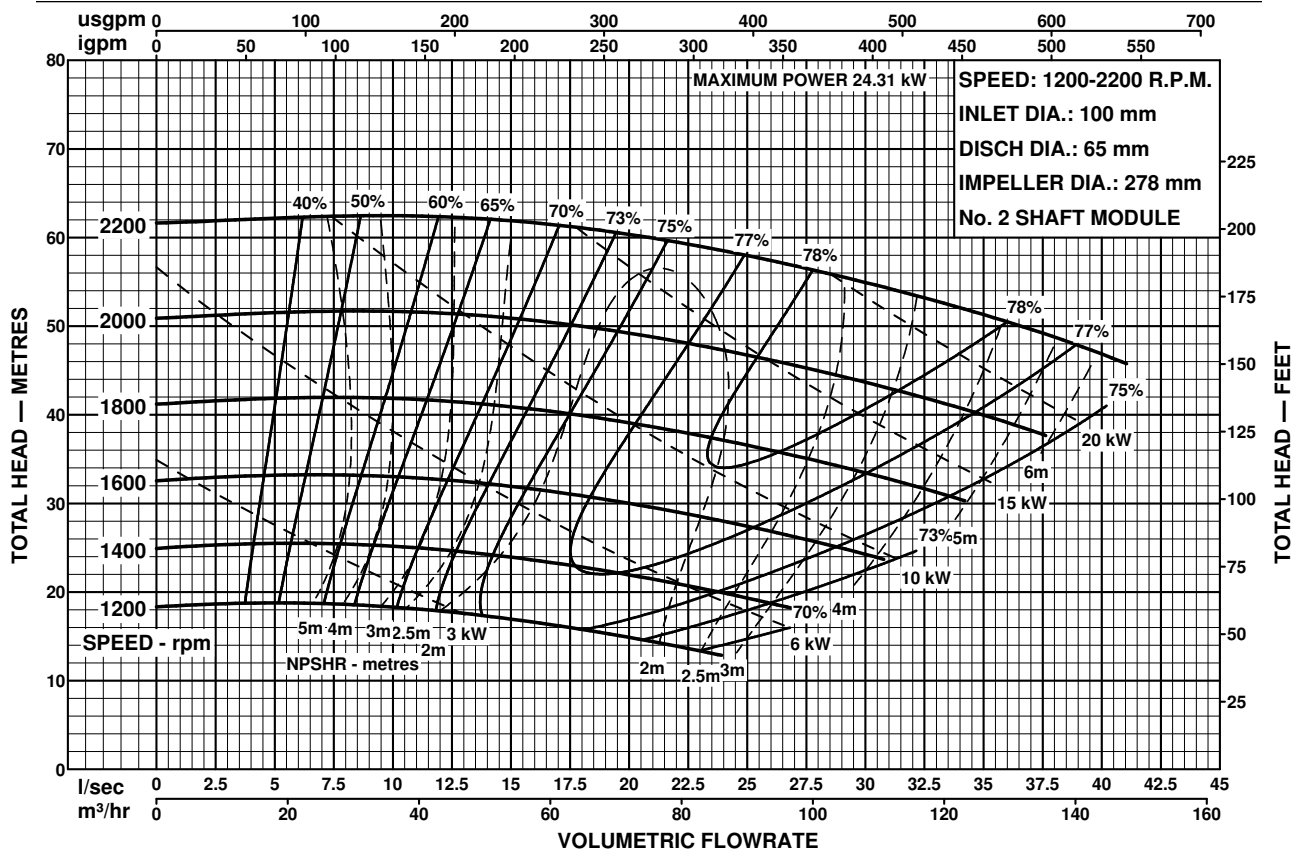
50Hz PERFORMANCE

MODEL  
100x65-250

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





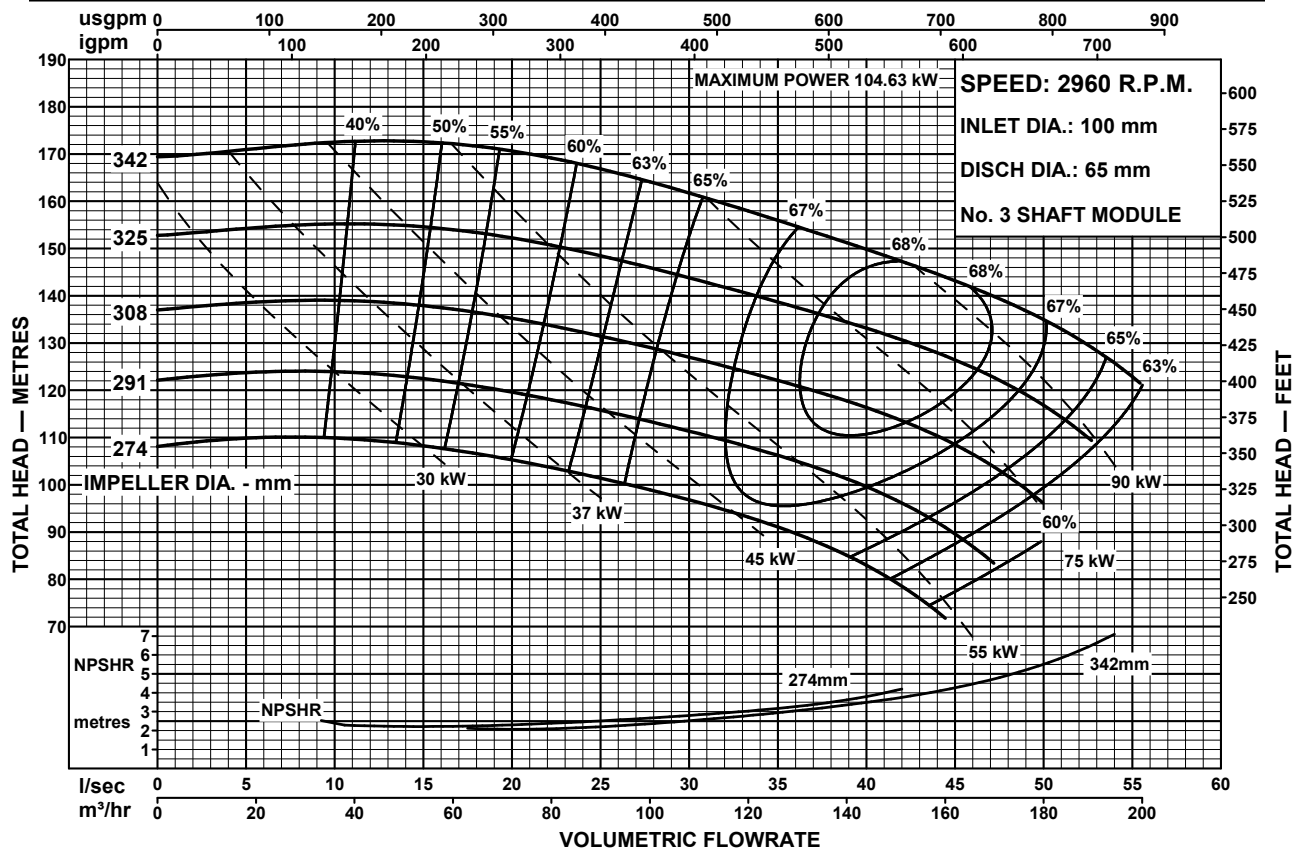
# PENTAIR

## ISO5199

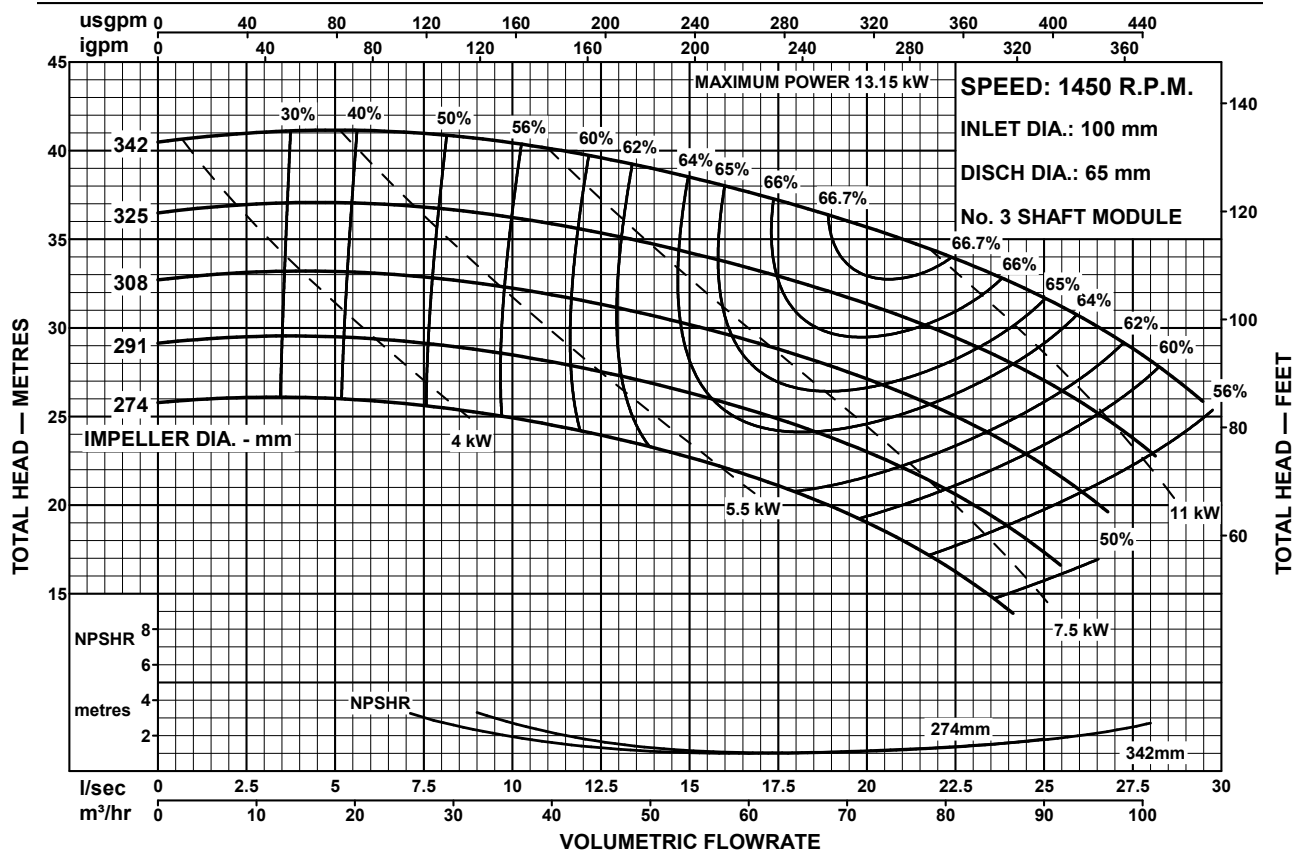
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**100x65-315**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

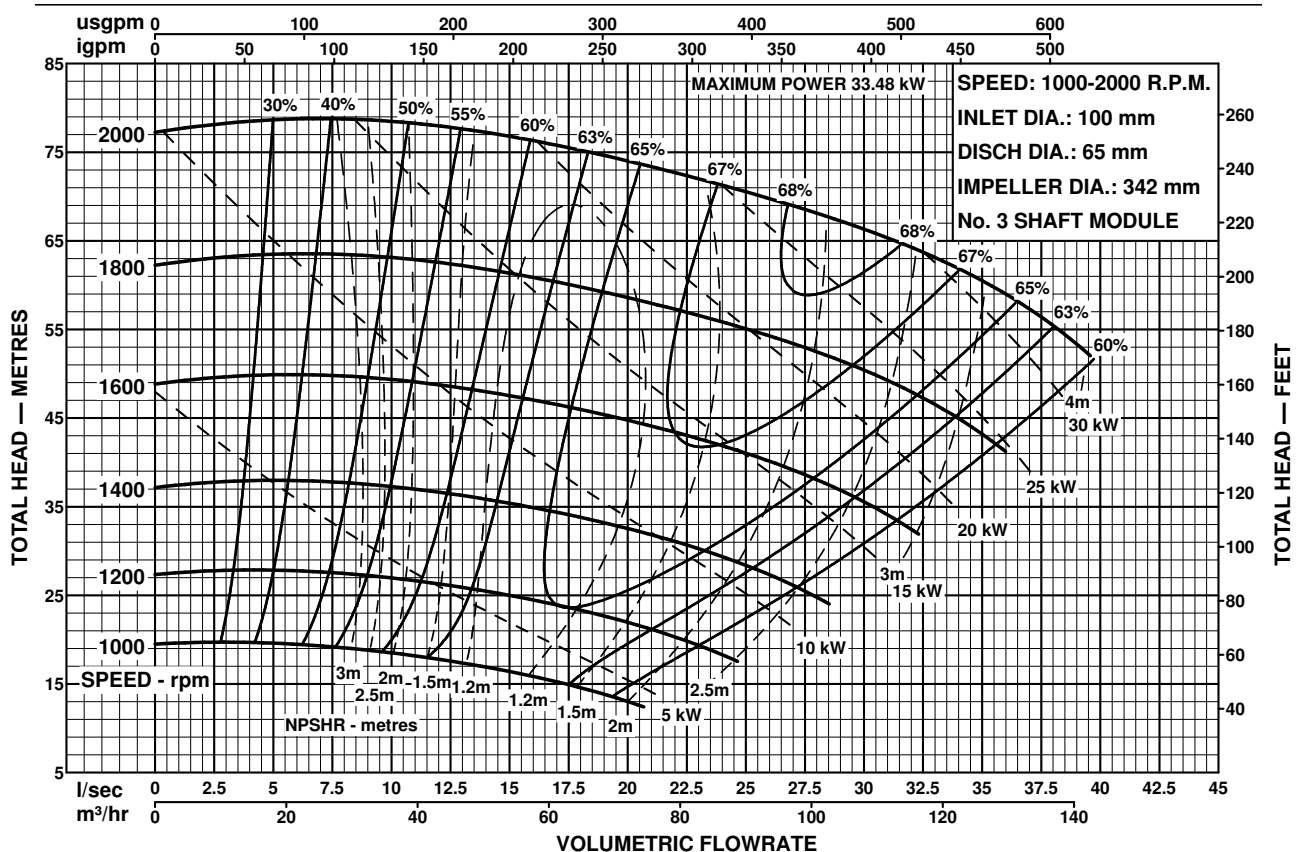
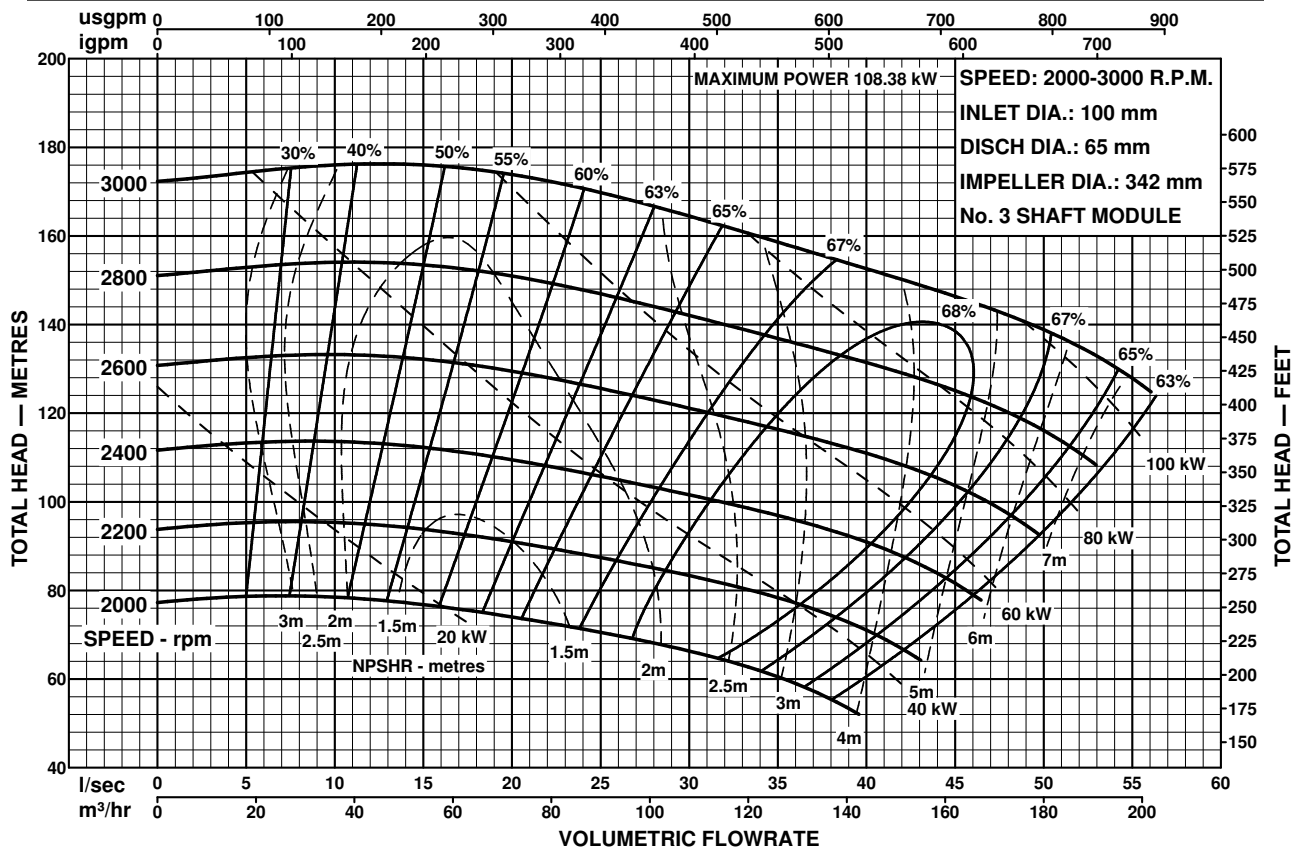
ISO5199

END SUCTION PUMPS

50Hz PERFORMANCE

CENTRIFUGAL PUMP PERFORMANCE DATA

MODEL  
**100x65-315**





PENTAIR

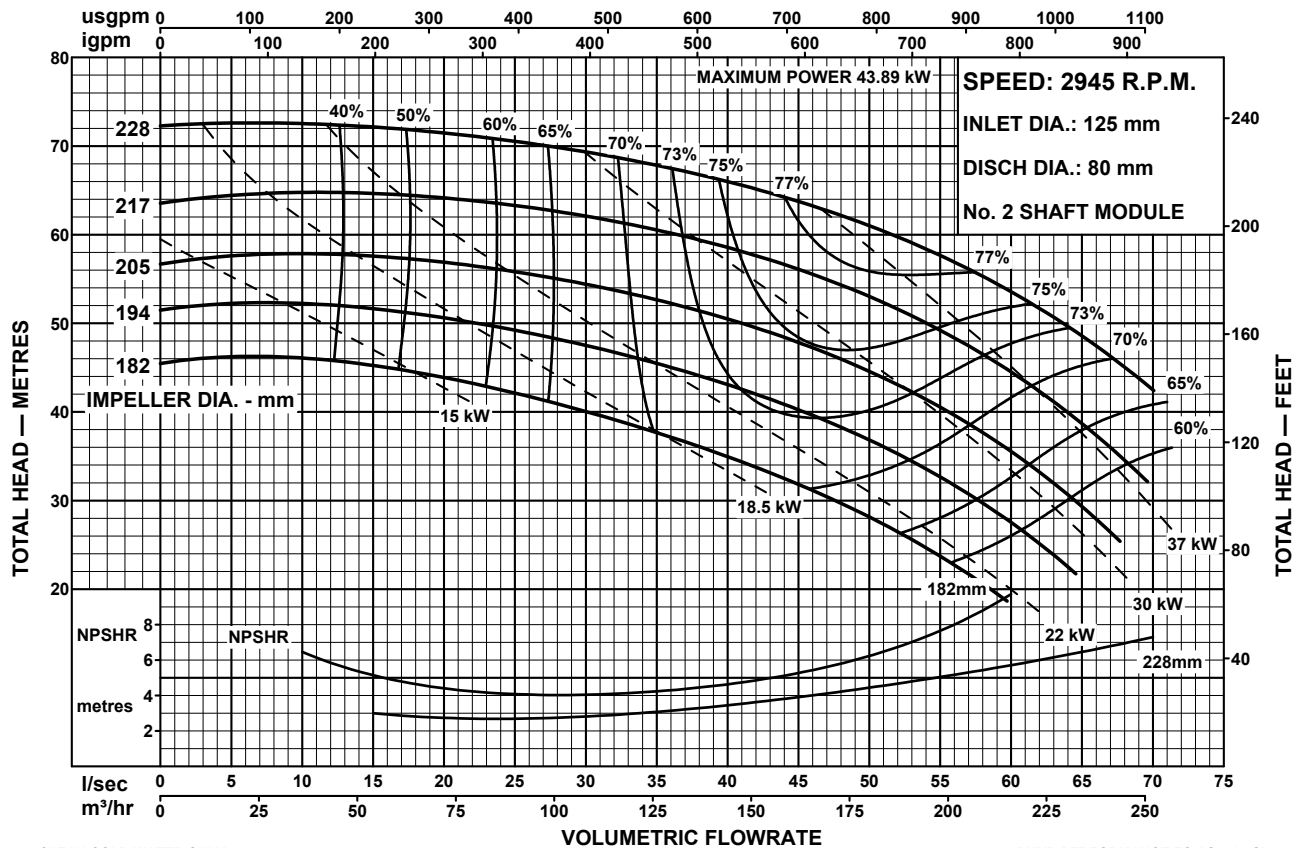
ISO5199

END SUCTION PUMPS

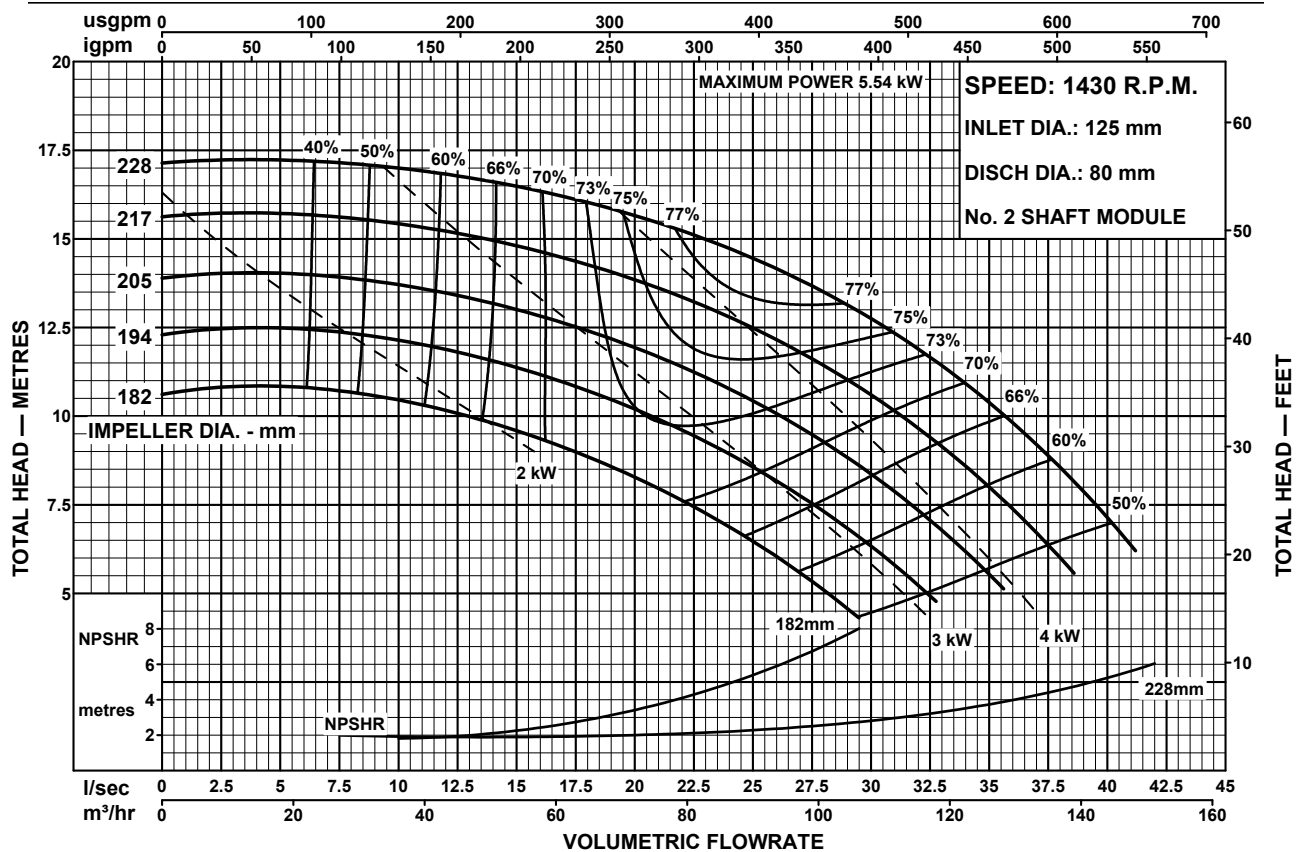
50Hz PERFORMANCE

MODEL  
125x80-200

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.







PENTAIR

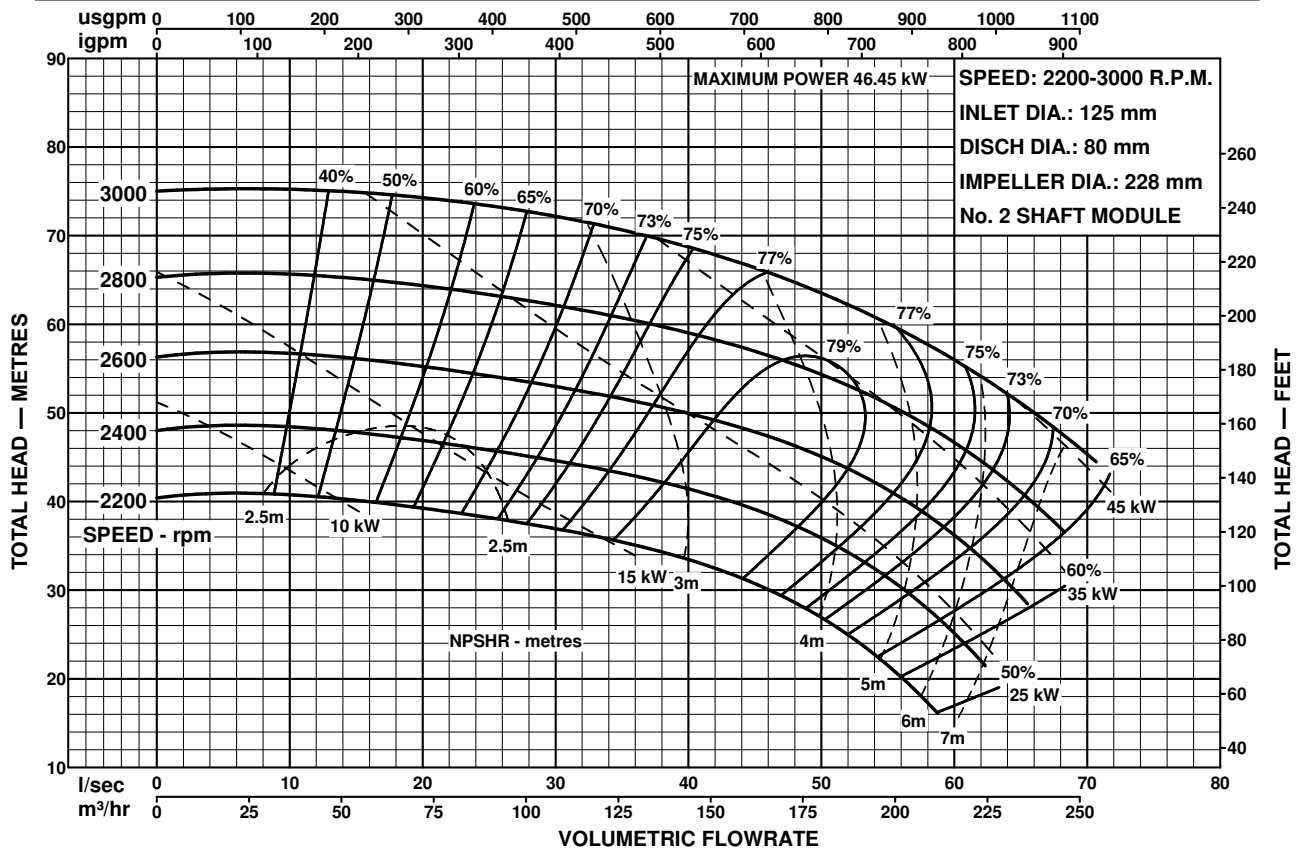
ISO5199

END SUCTION PUMPS

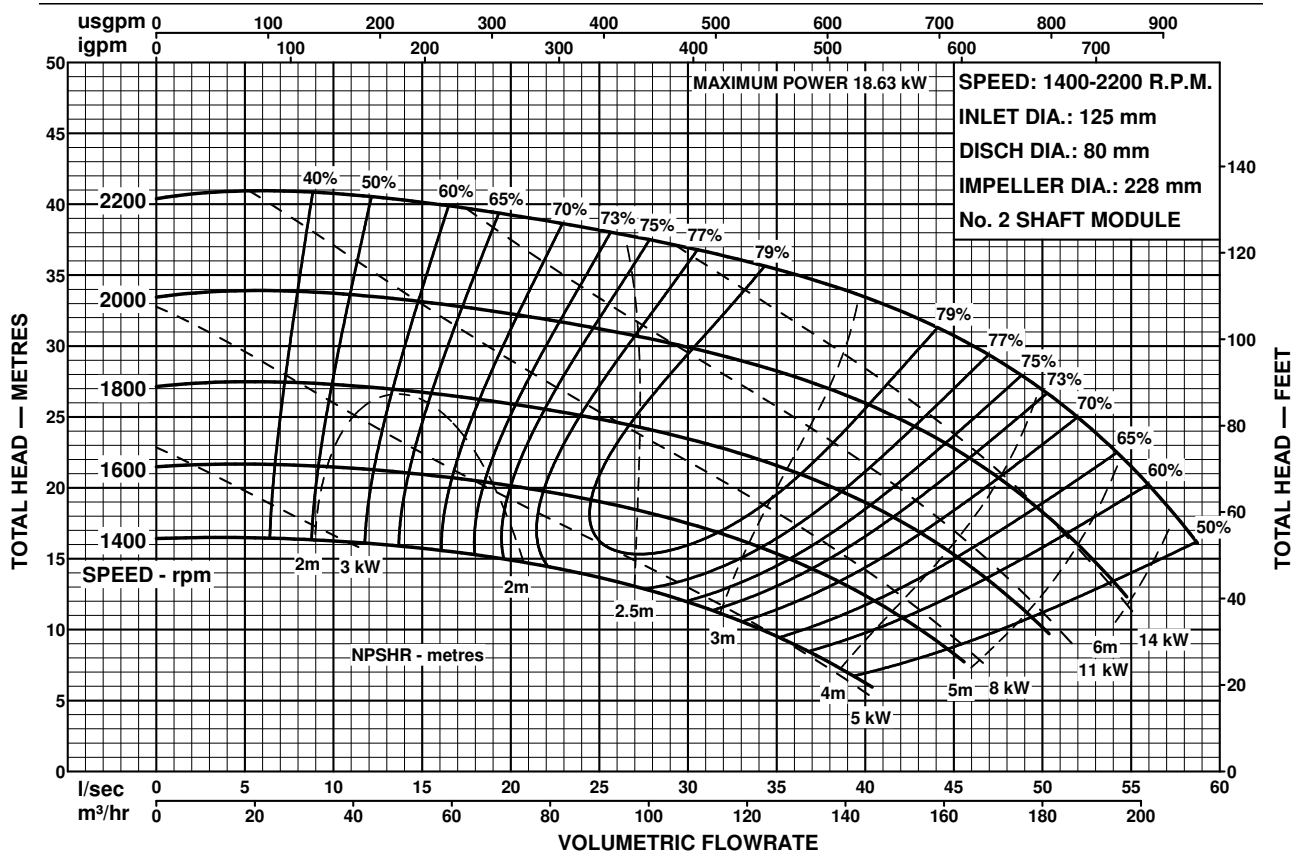
50Hz PERFORMANCE

MODEL  
125x80-200

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.







PENTAIR

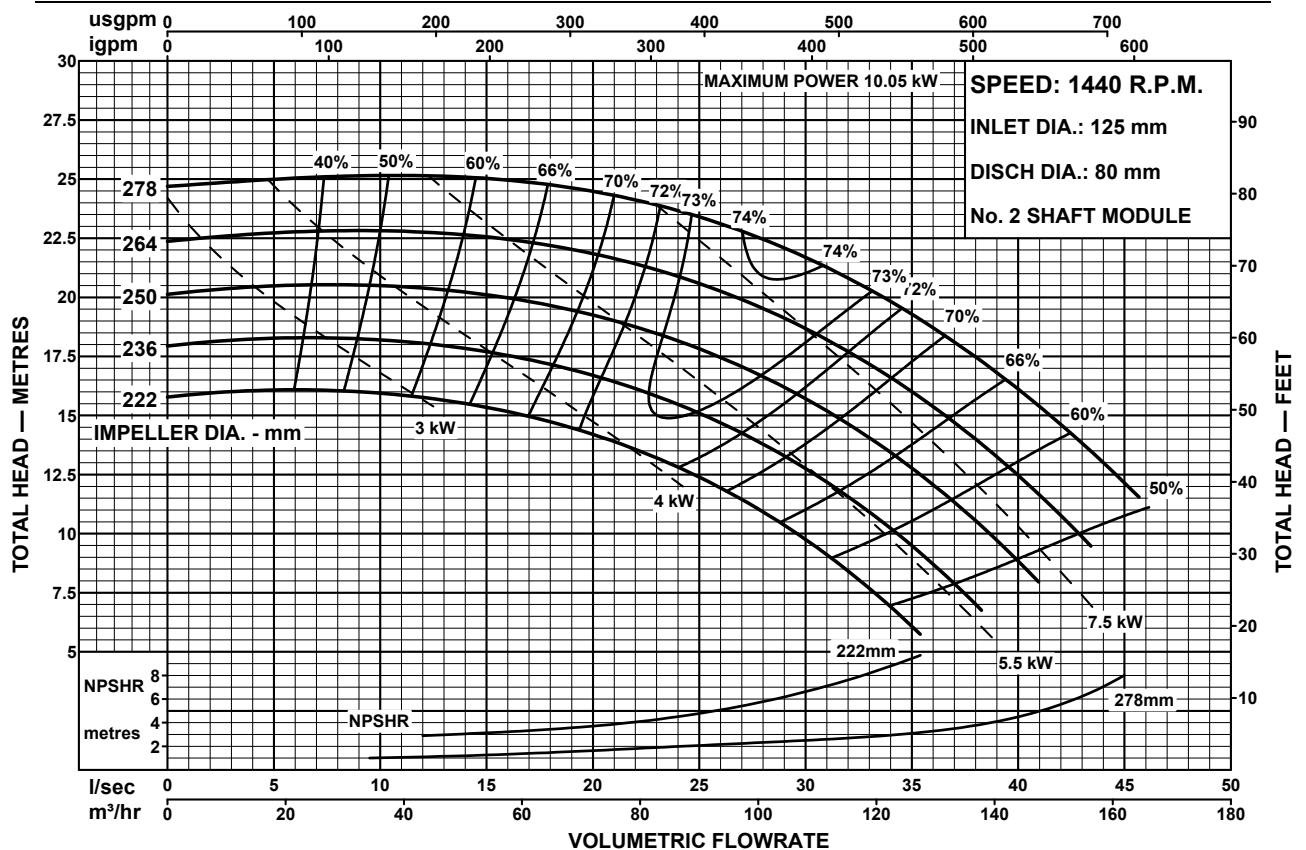
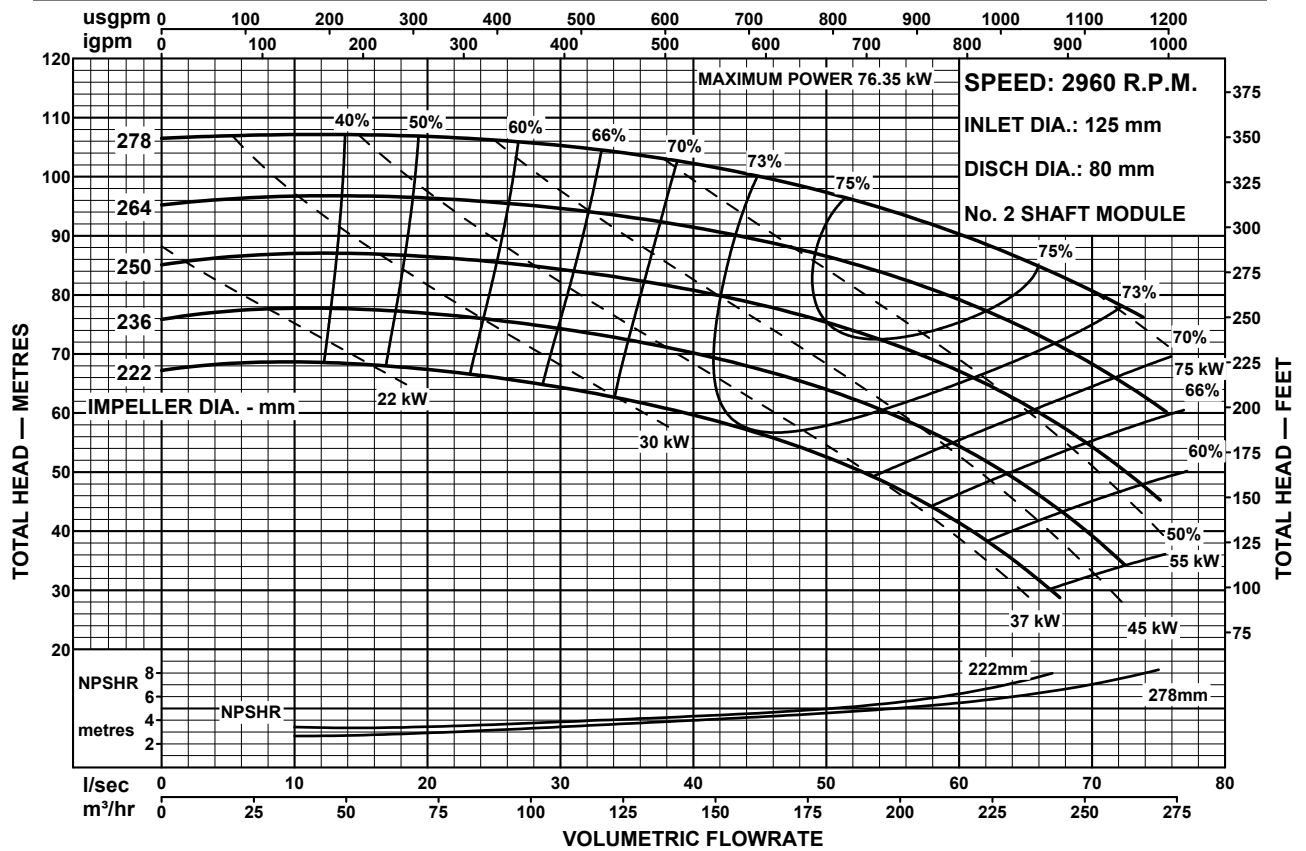
ISO5199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
125x80-250

CENTRIFUGAL PUMP PERFORMANCE DATA





PENTAIR

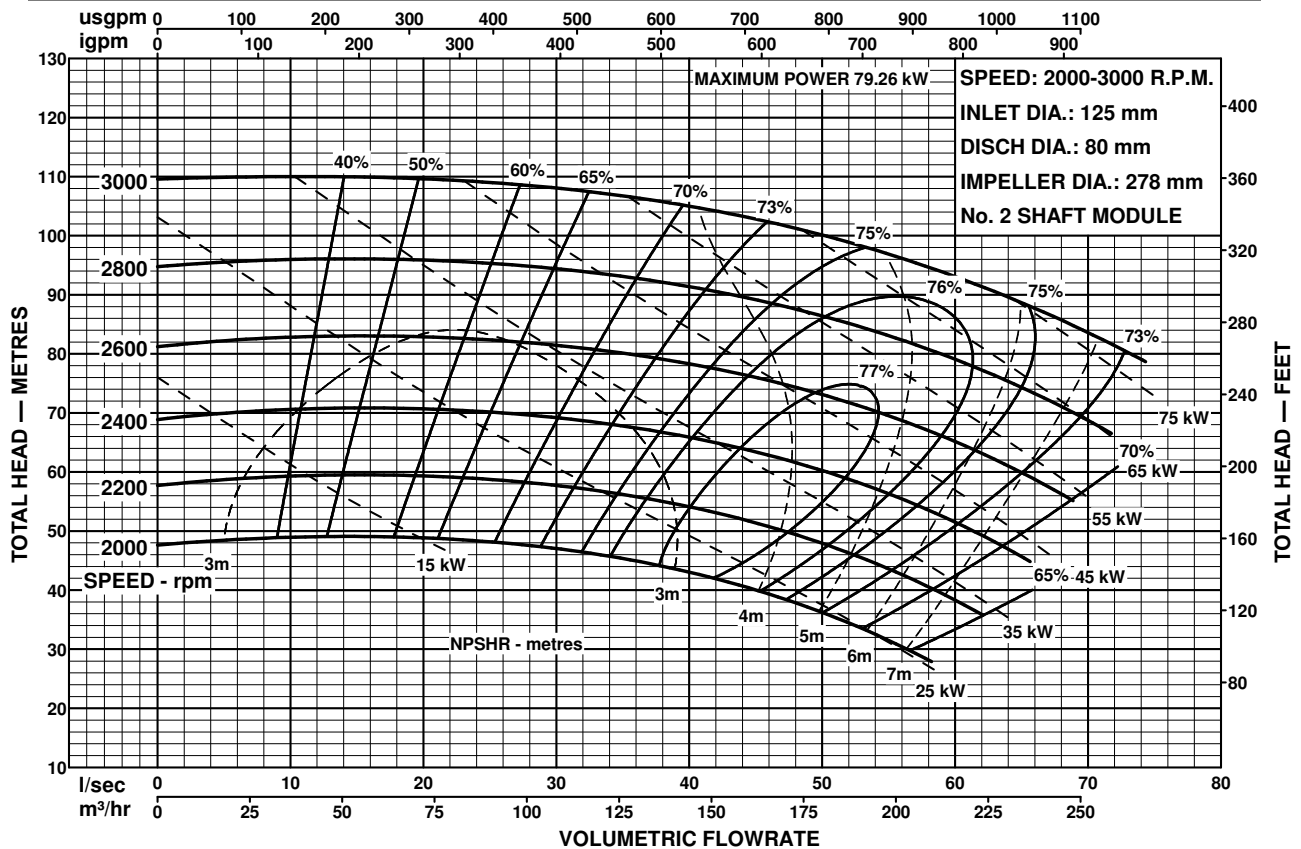
ISO5199

END SUCTION PUMPS

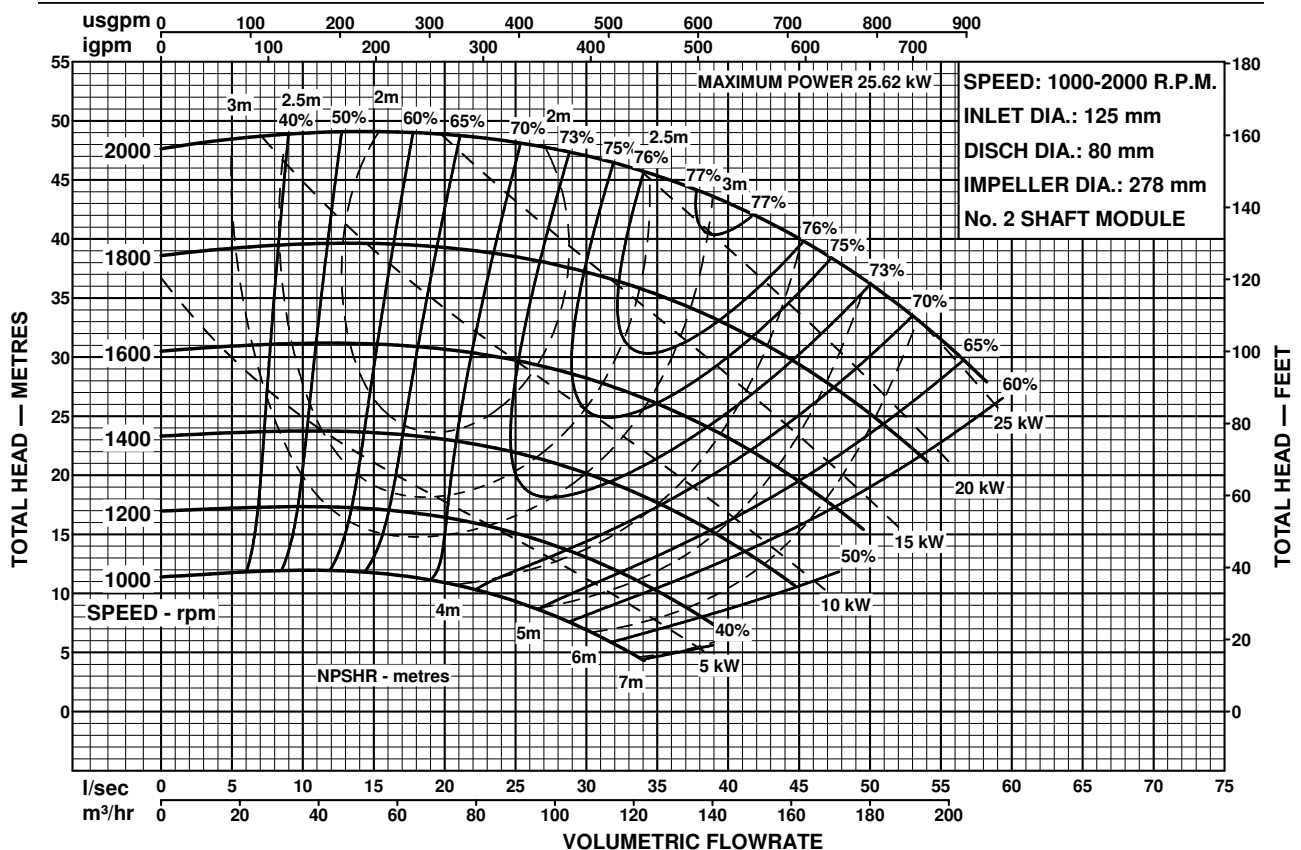
50Hz PERFORMANCE

CENTRIFUGAL PUMP PERFORMANCE DATA

MODEL  
125x80-250



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

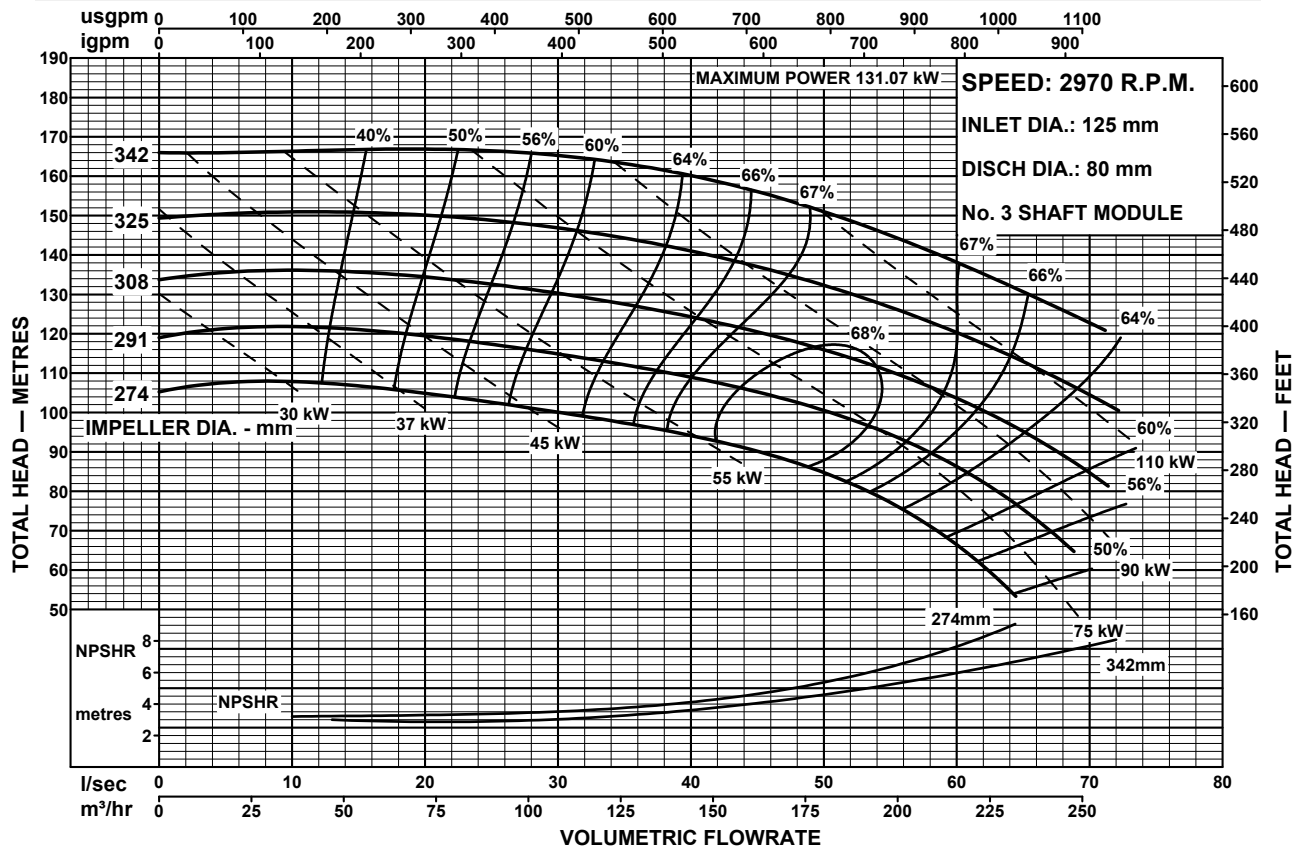
ISO5199

END SUCTION PUMPS

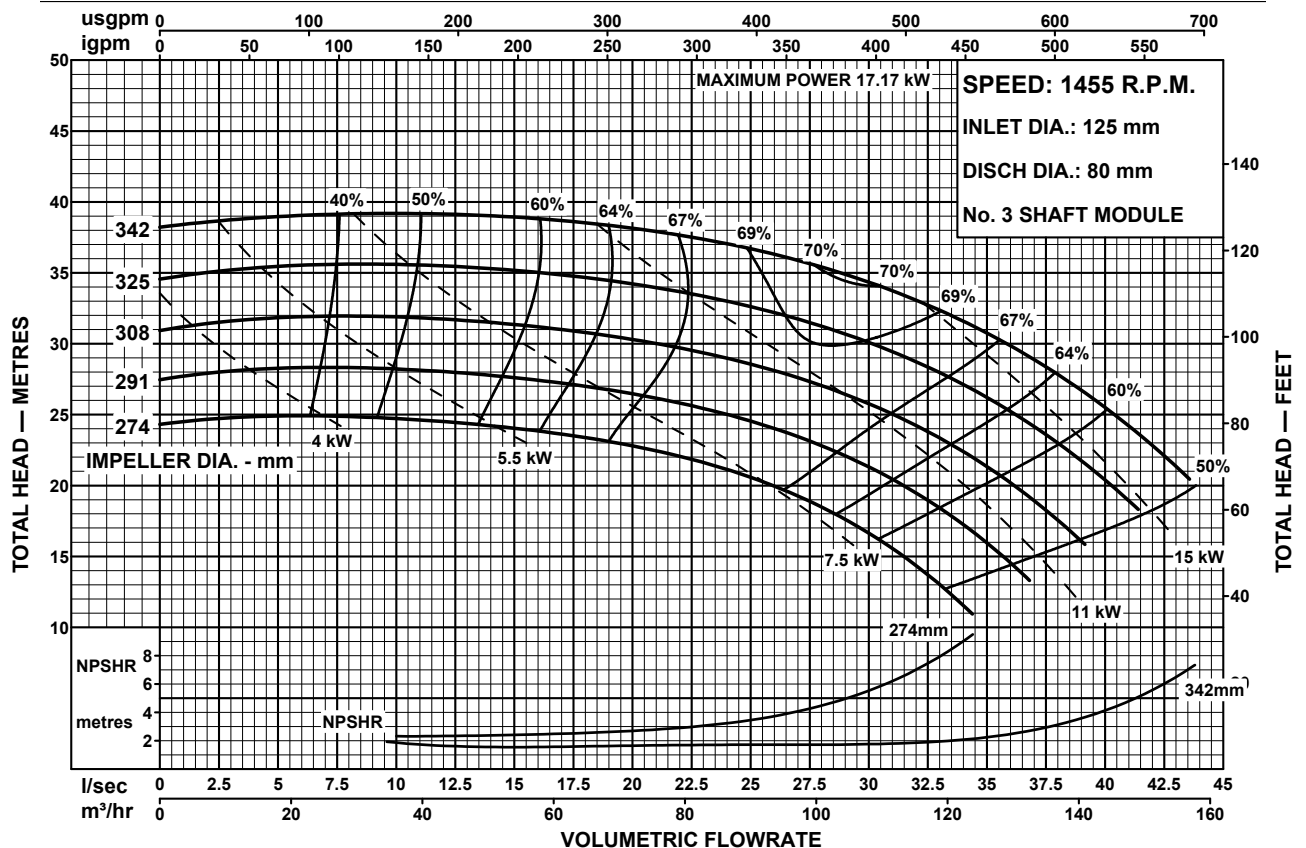
50Hz PERFORMANCE

MODEL  
125x80-315

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





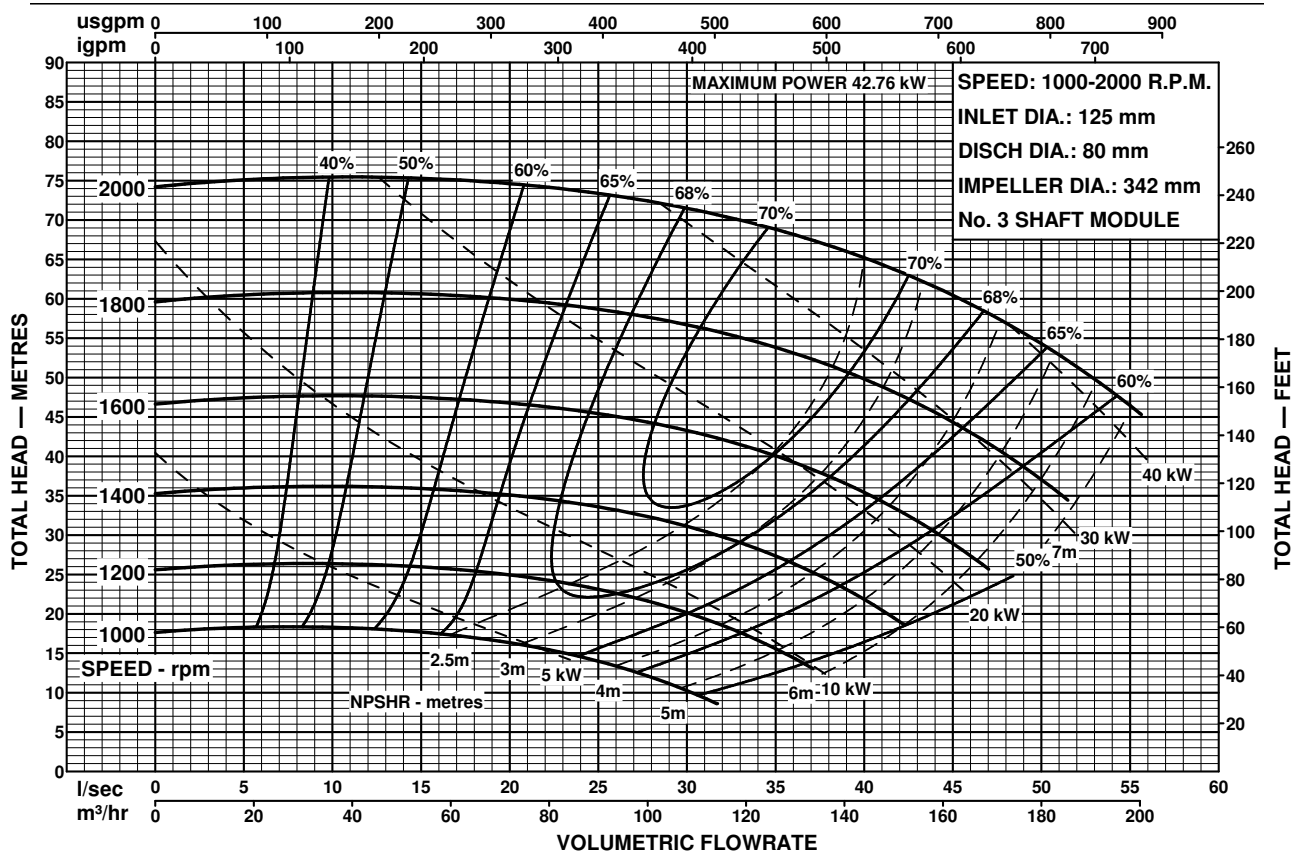
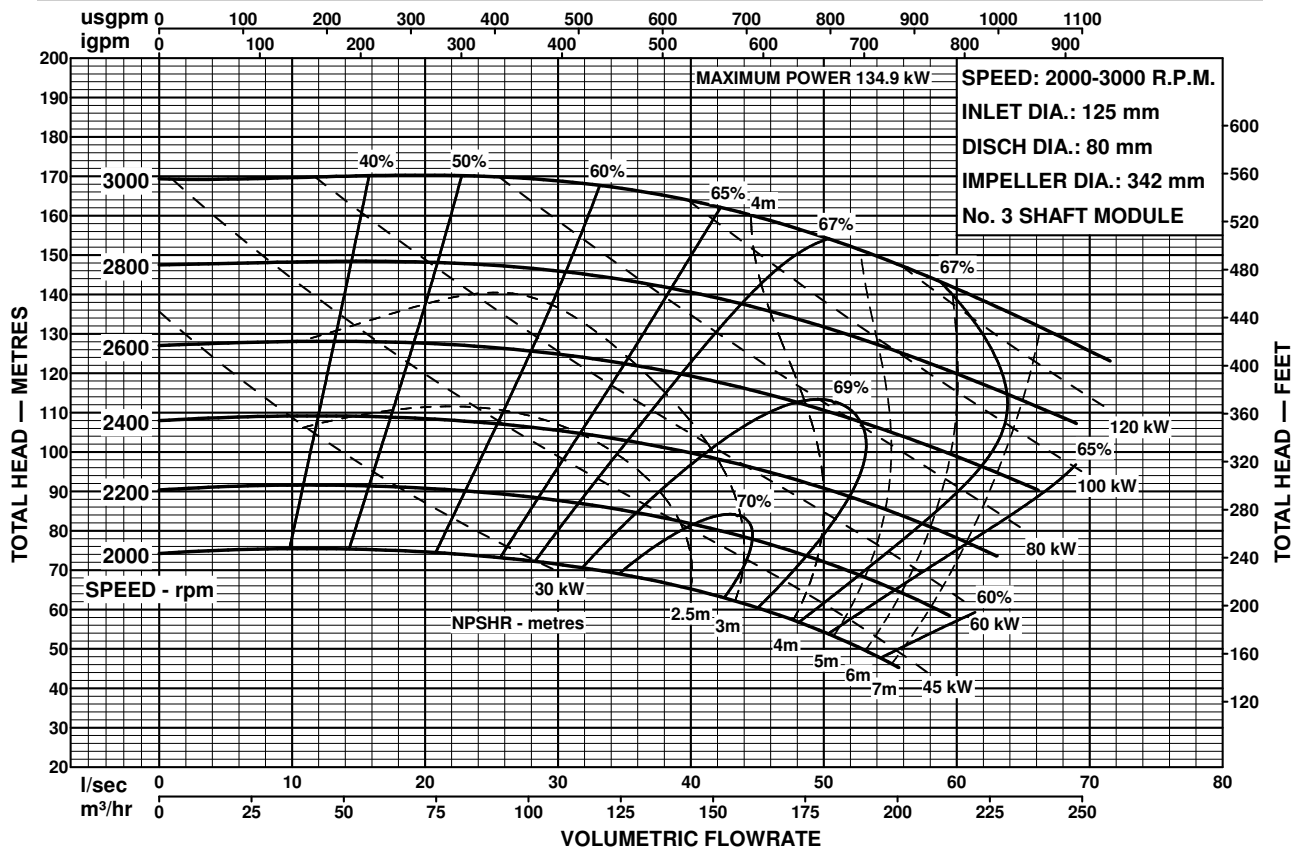
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**125x80-315**

CENTRIFUGAL PUMP PERFORMANCE DATA





PENTAIR

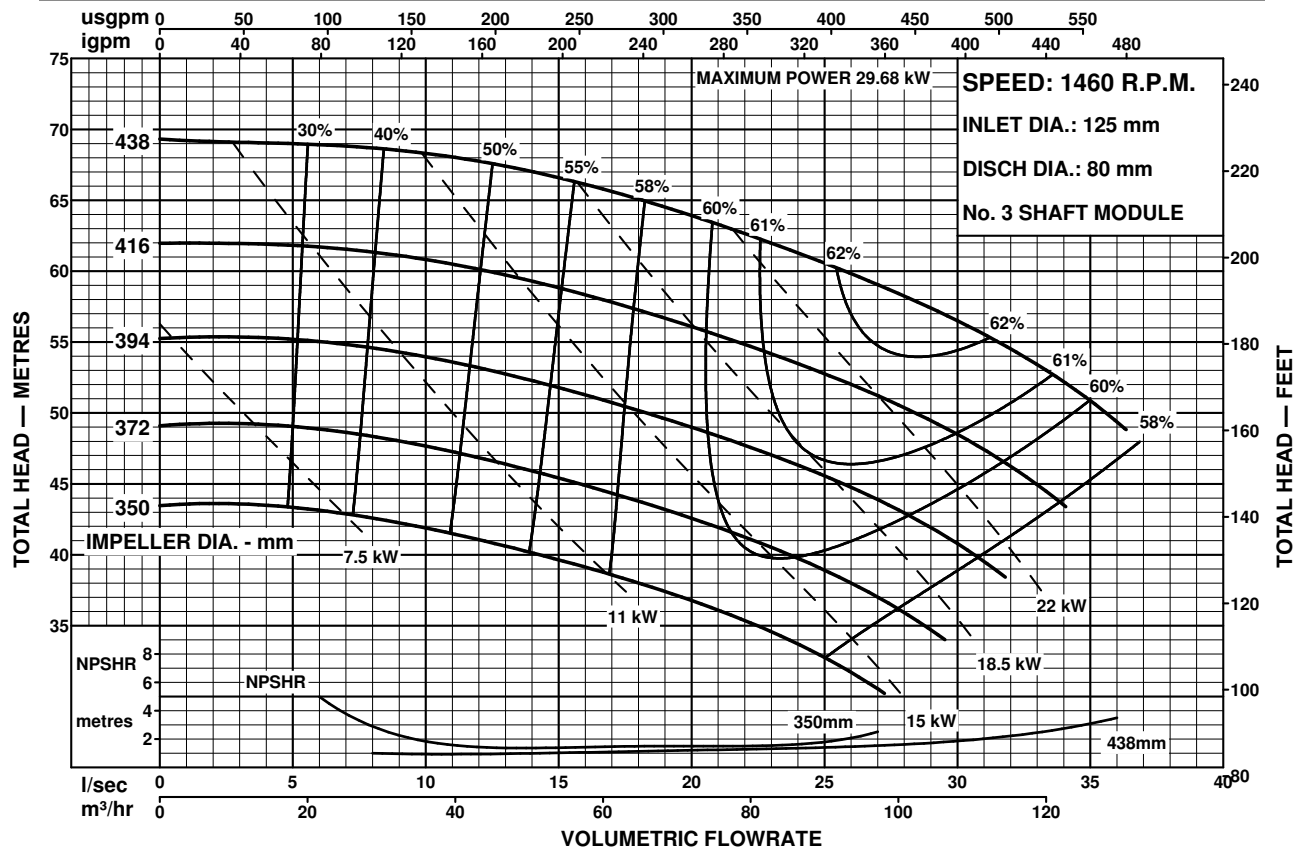
IS05199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
125x80-400

CENTRIFUGAL PUMP PERFORMANCE DATA







PENTAIR

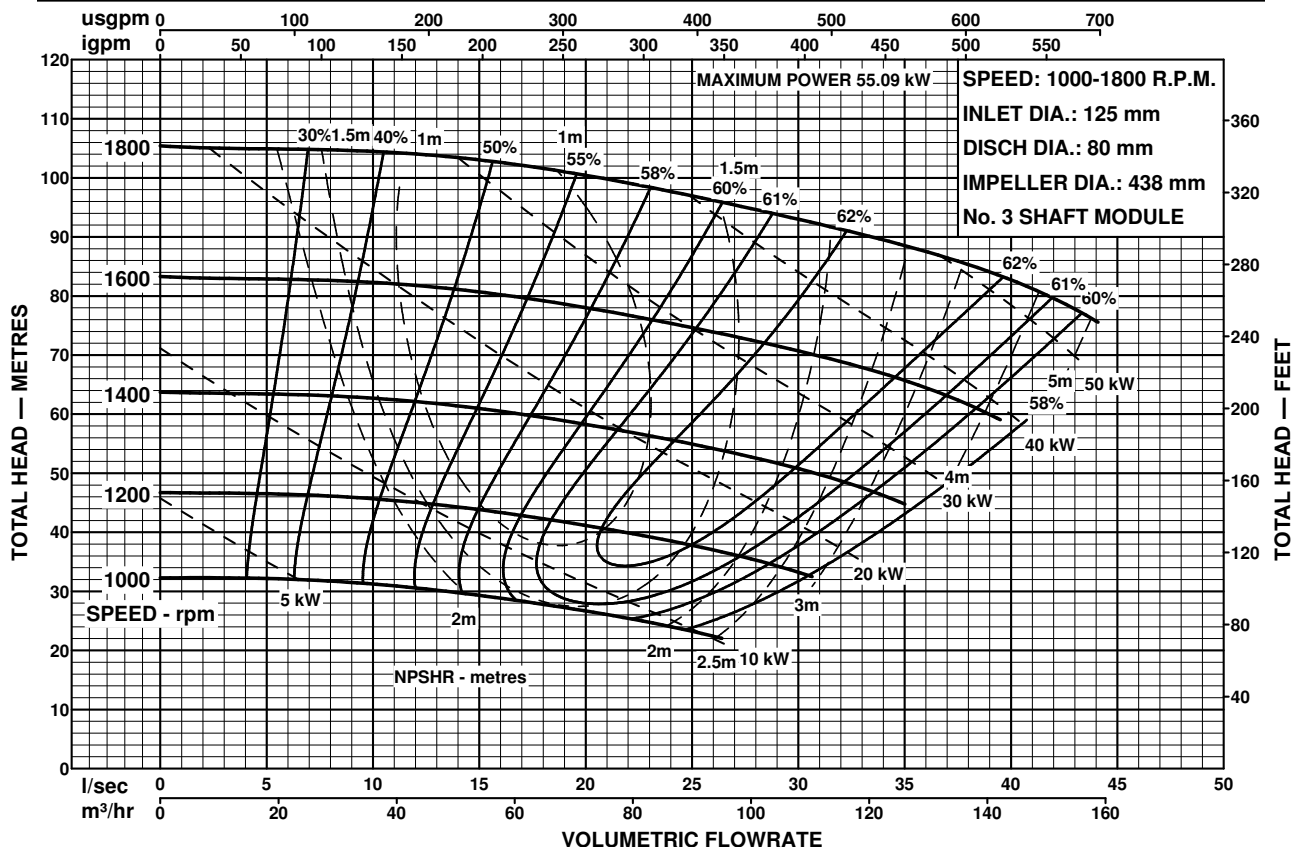
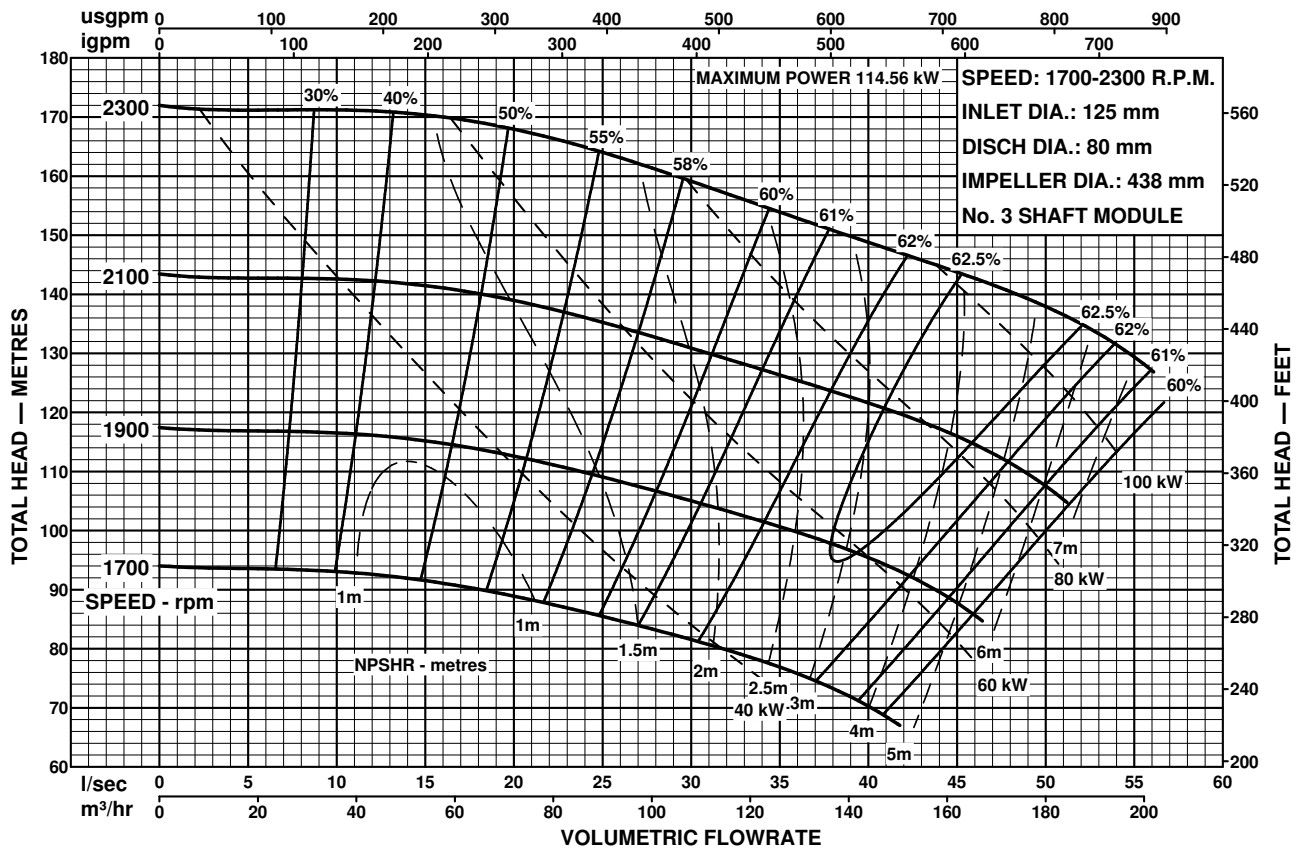
ISO5199

END SUCTION PUMPS

50Hz PERFORMANCE

CENTRIFUGAL PUMP PERFORMANCE DATA

MODEL  
**125x80-400**





PENTAIR

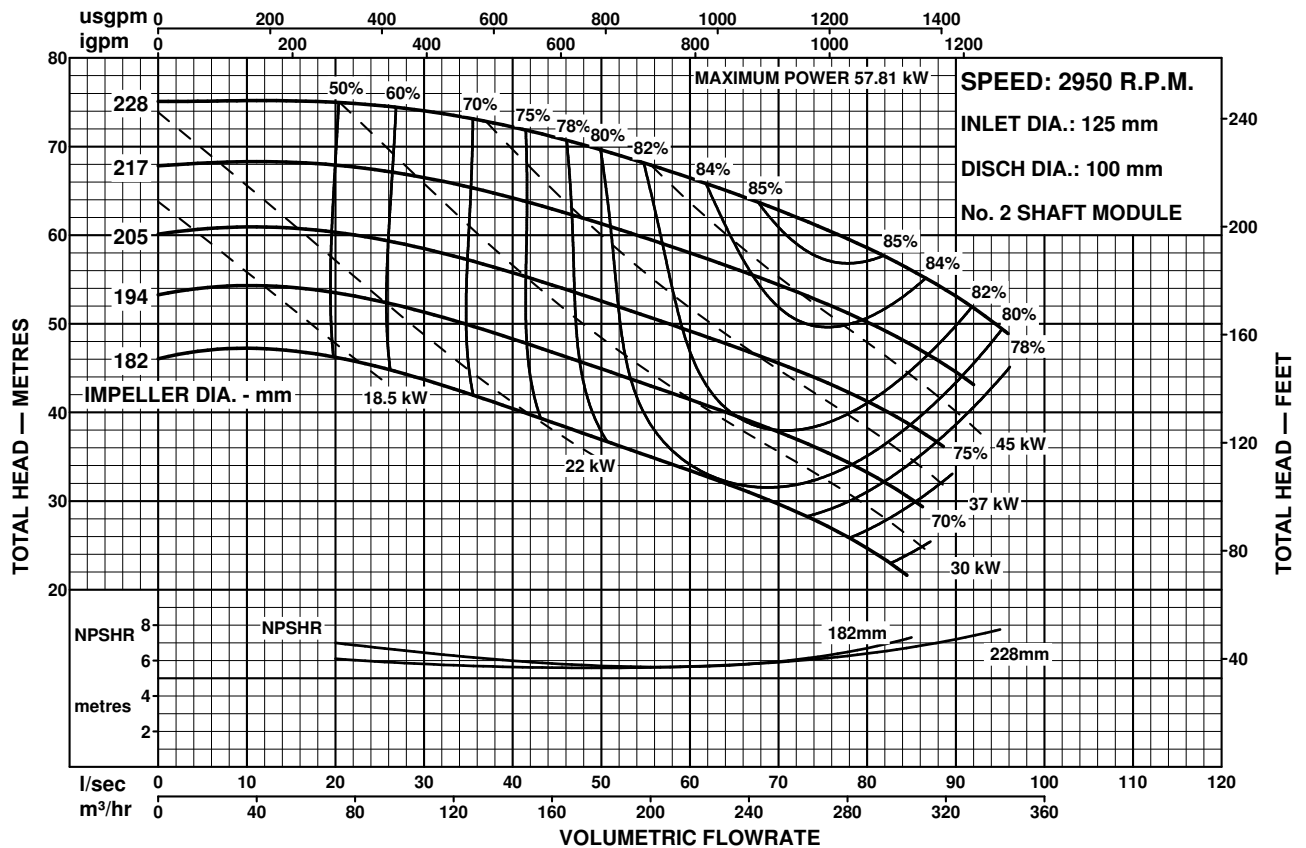
ISO5199

END SUCTION PUMPS

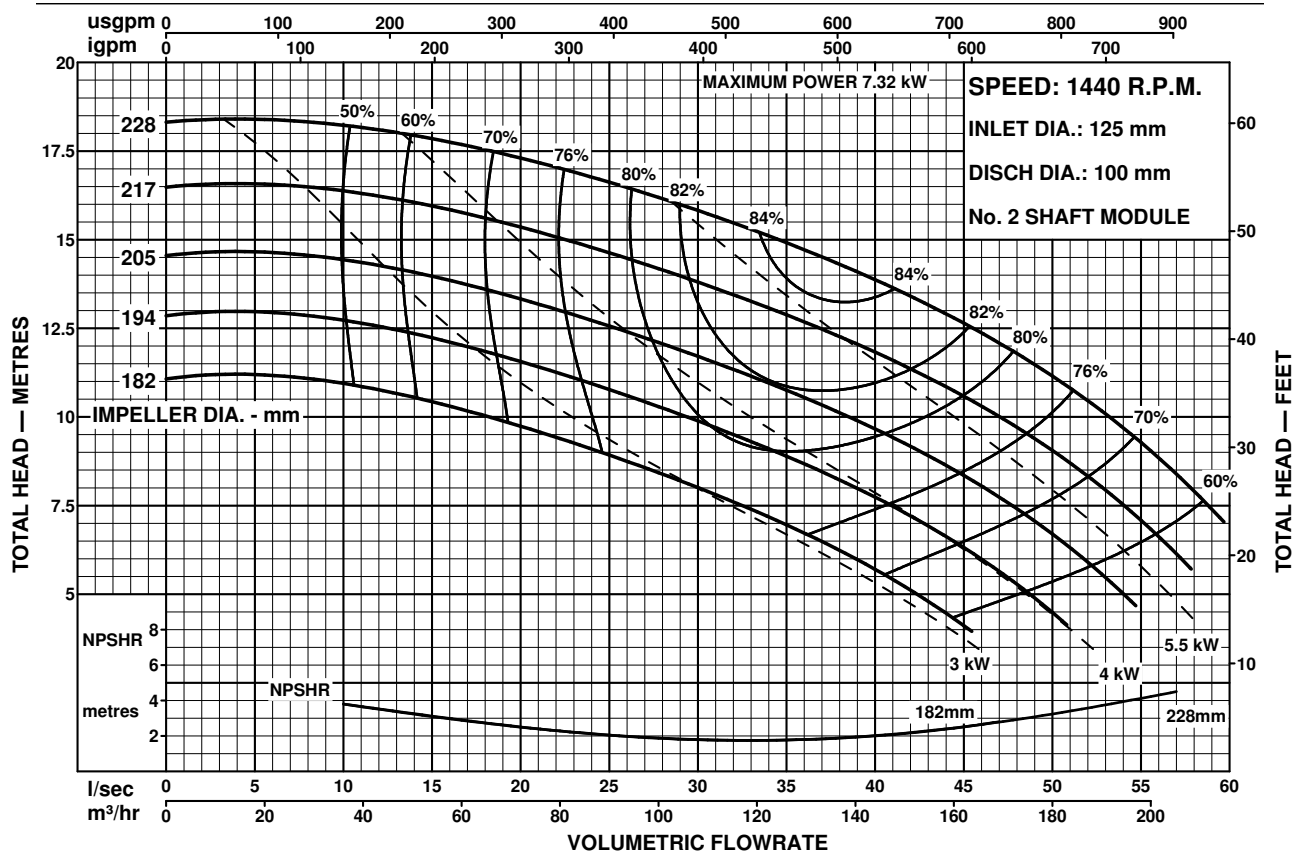
50Hz PERFORMANCE

MODEL  
125x100-200

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





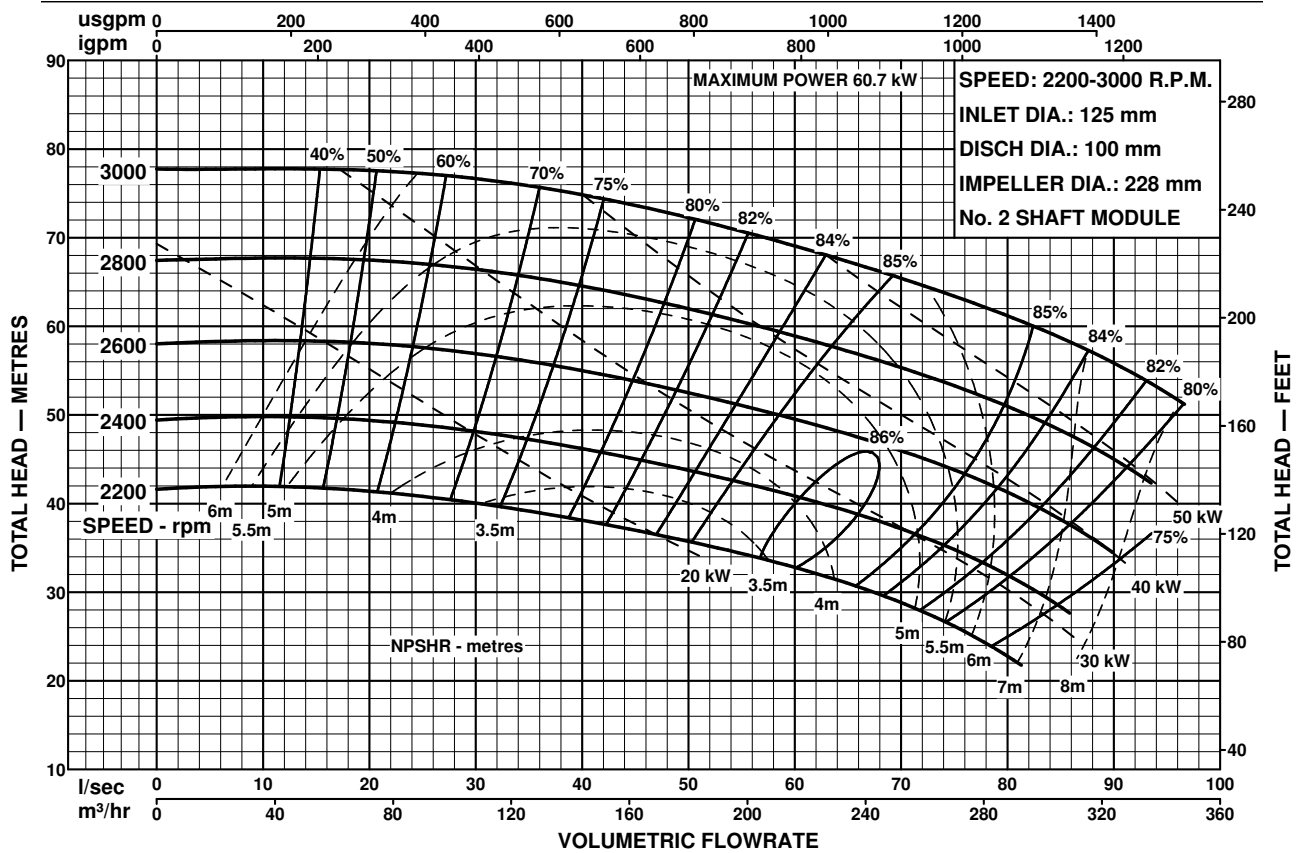
PENTAIR

ISO5199

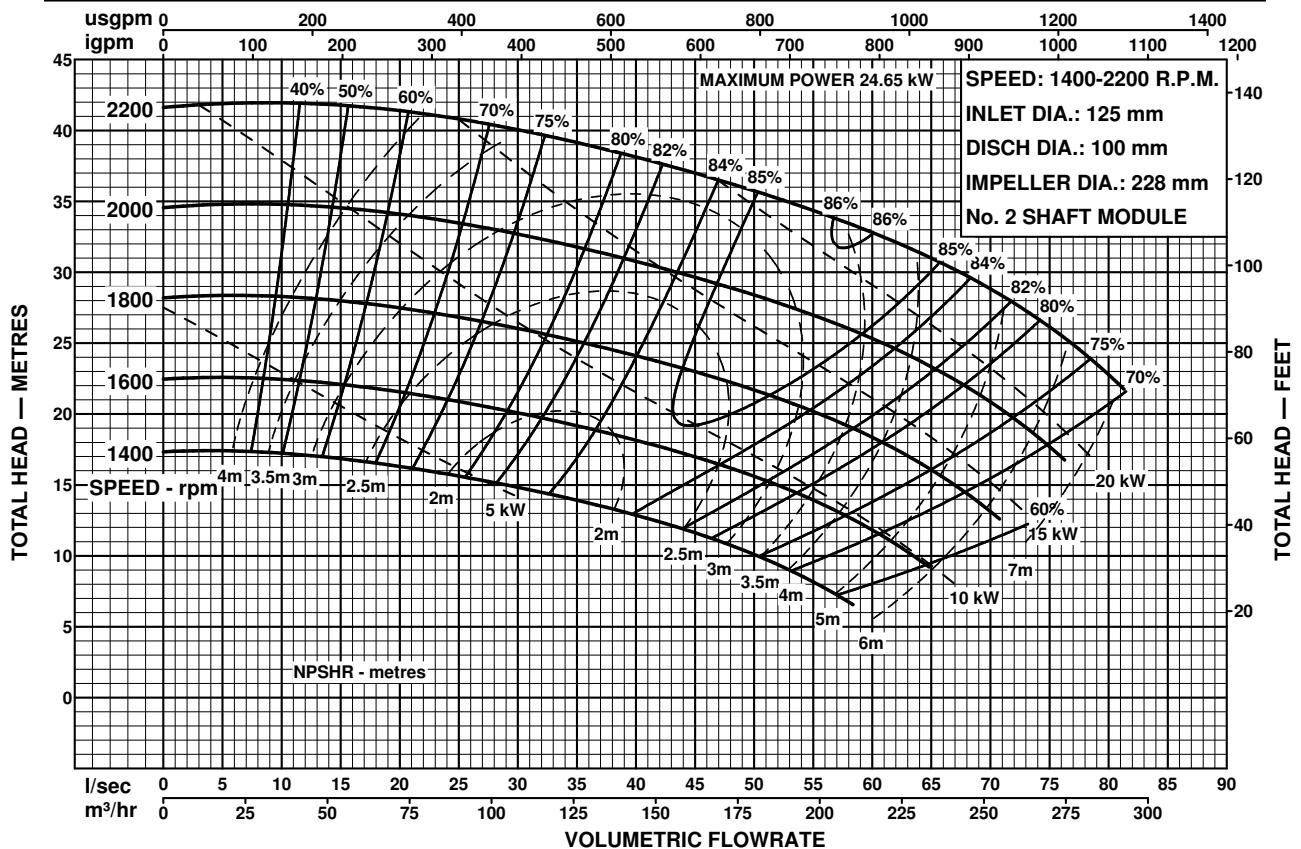
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**125x100-200**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

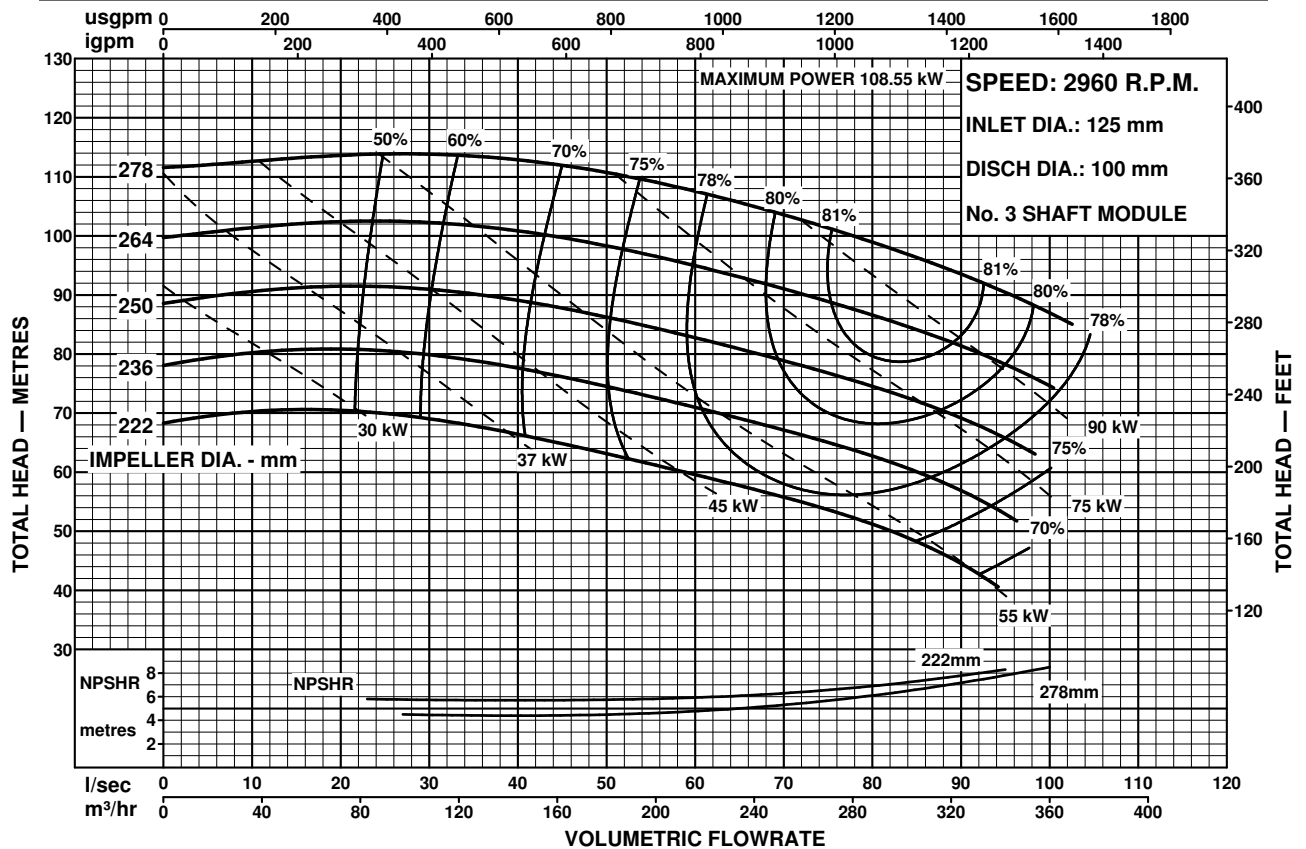
ISO5199

END SUCTION PUMPS

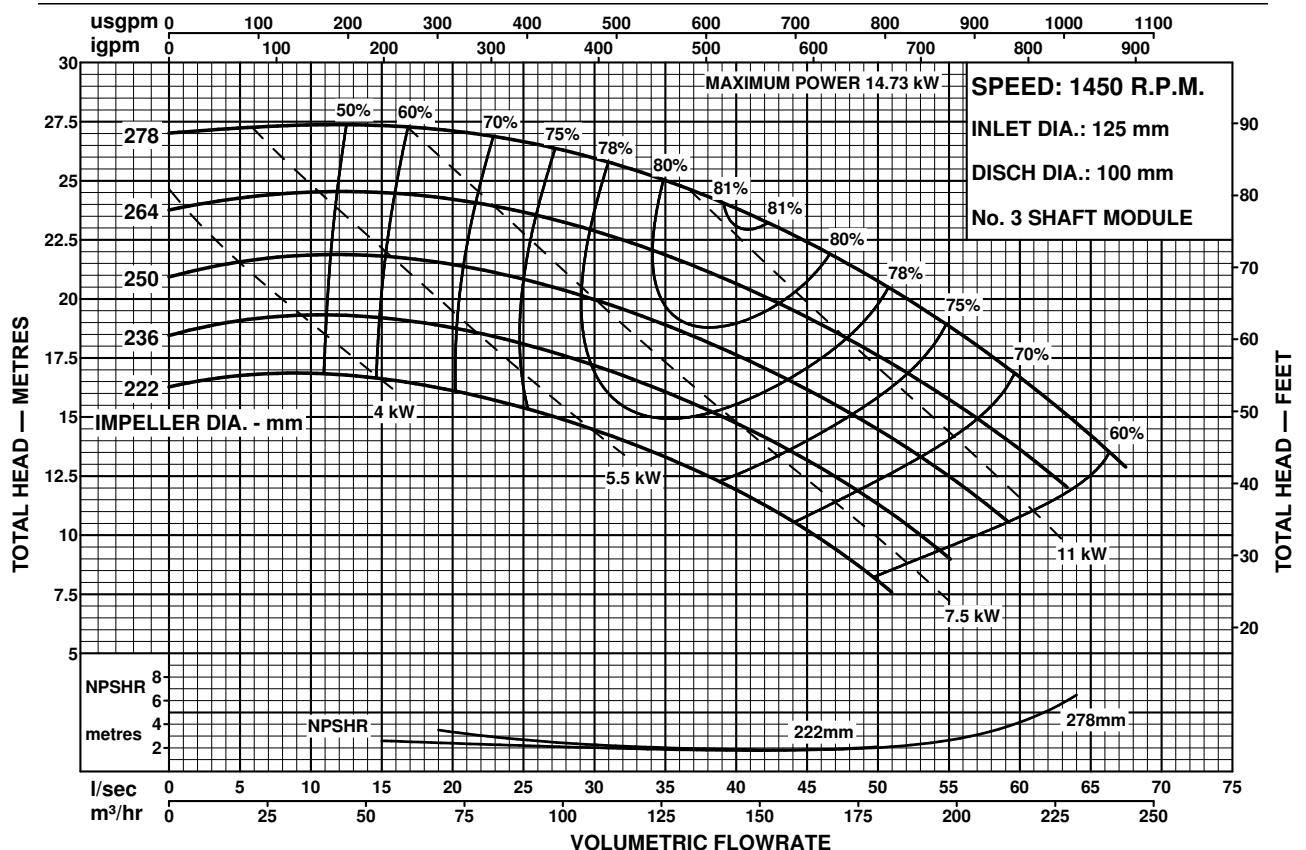
50Hz PERFORMANCE

MODEL  
125x100-250

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

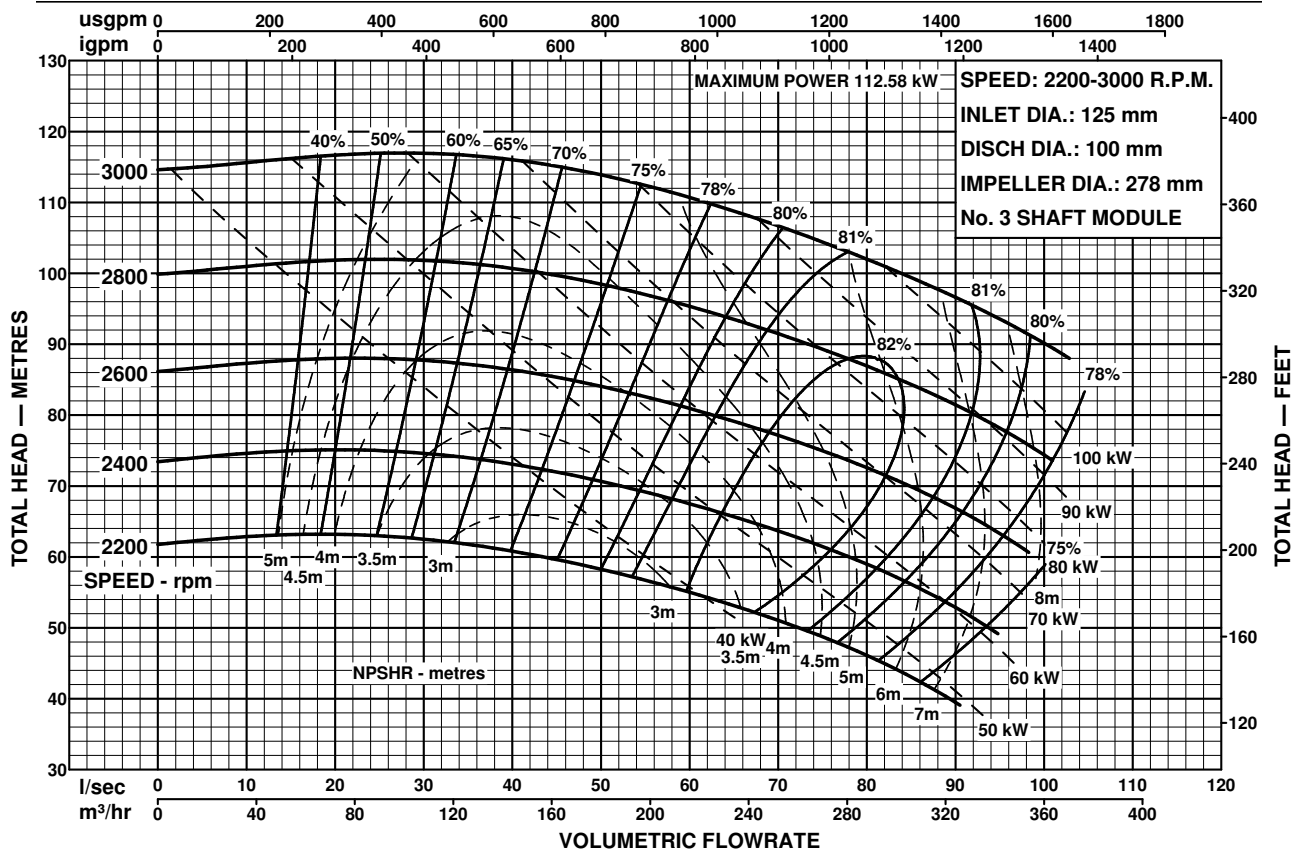
ISO5199

END SUCTION PUMPS

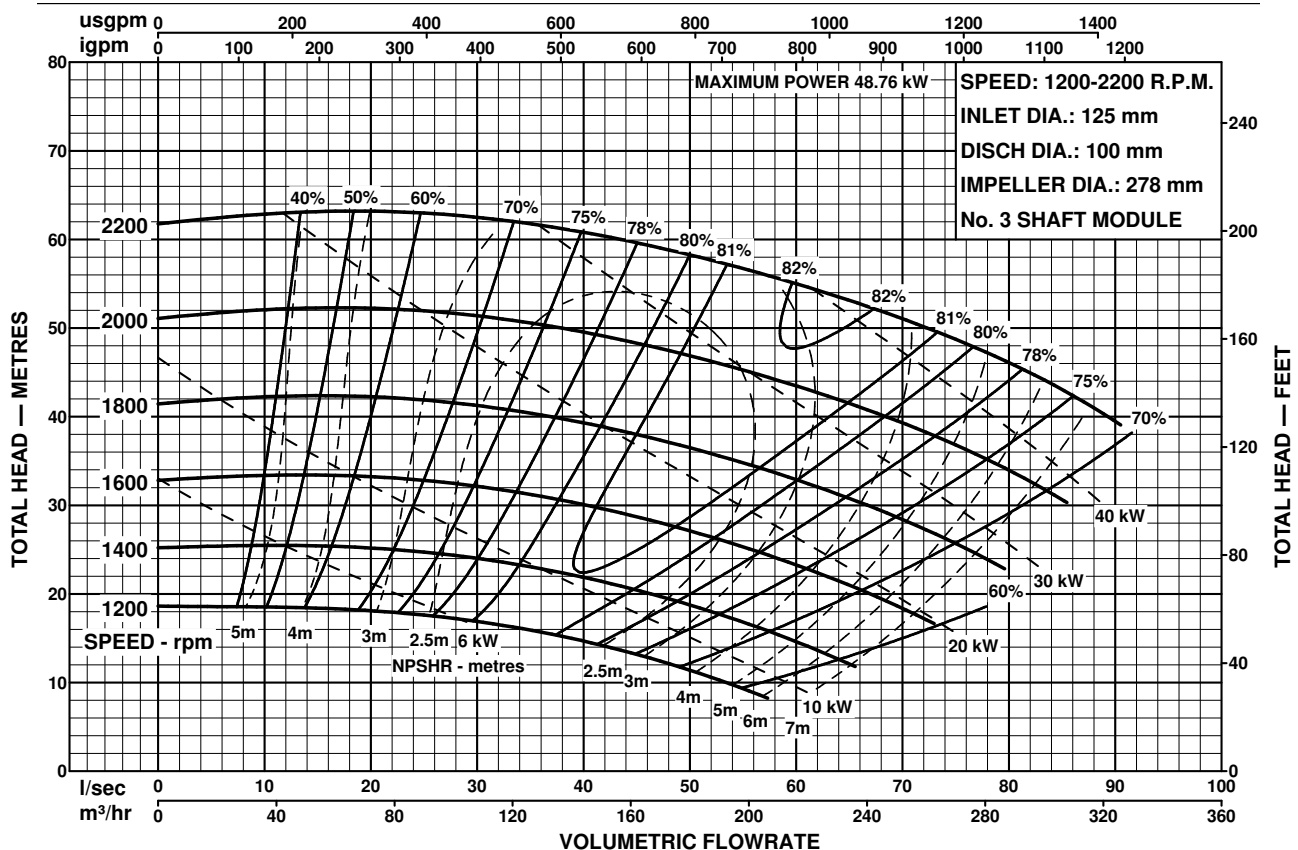
50Hz PERFORMANCE

MODEL  
125x100-250

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





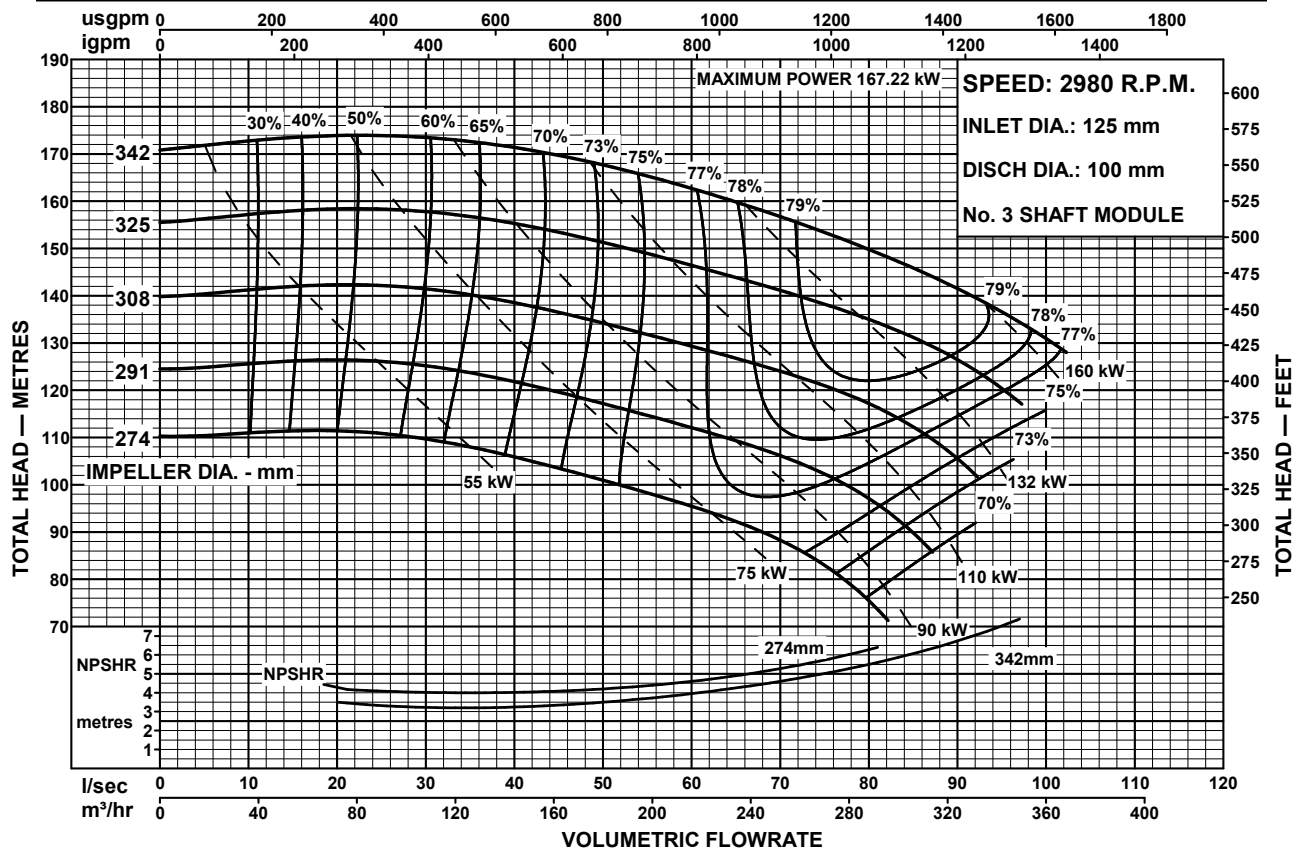


PENTAIR

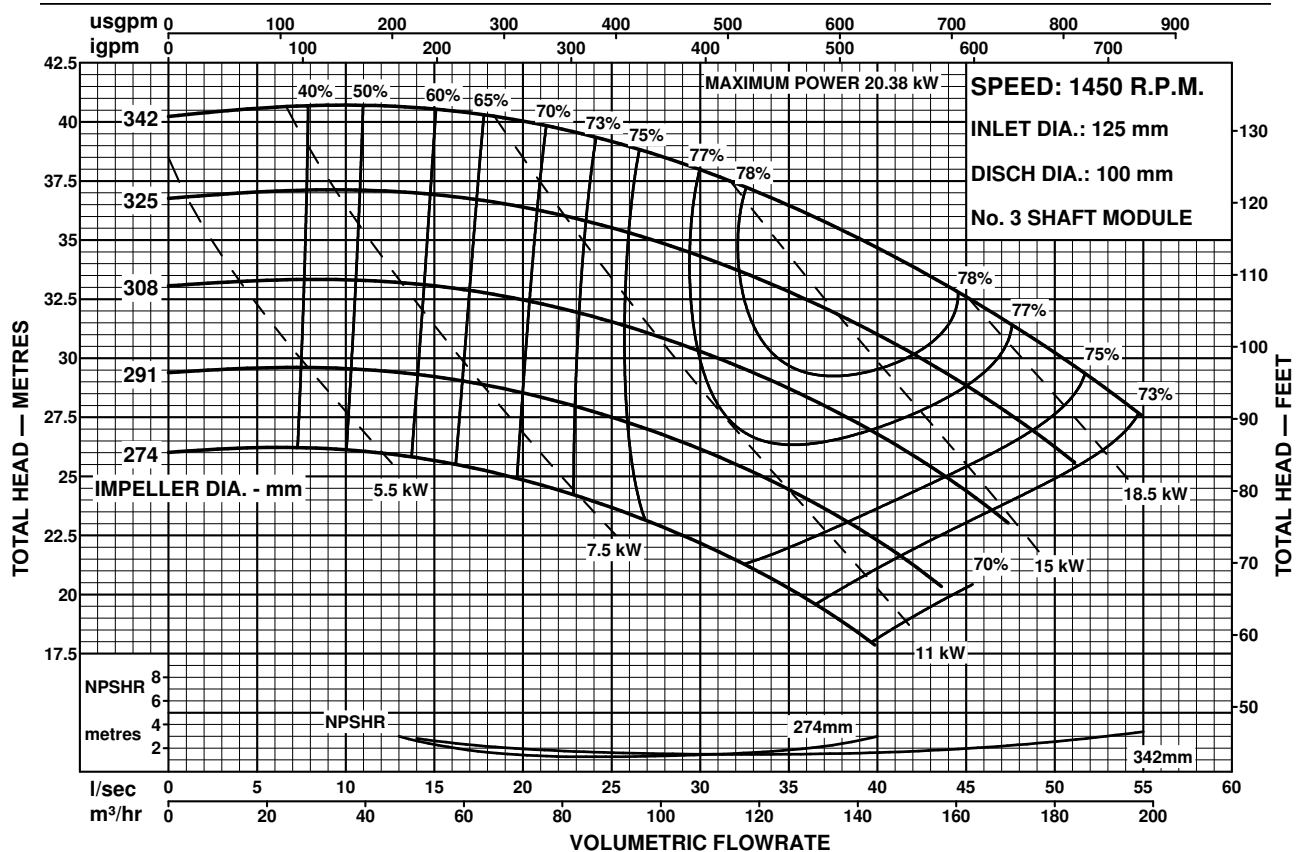
ISO5199  
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**125x100-315**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

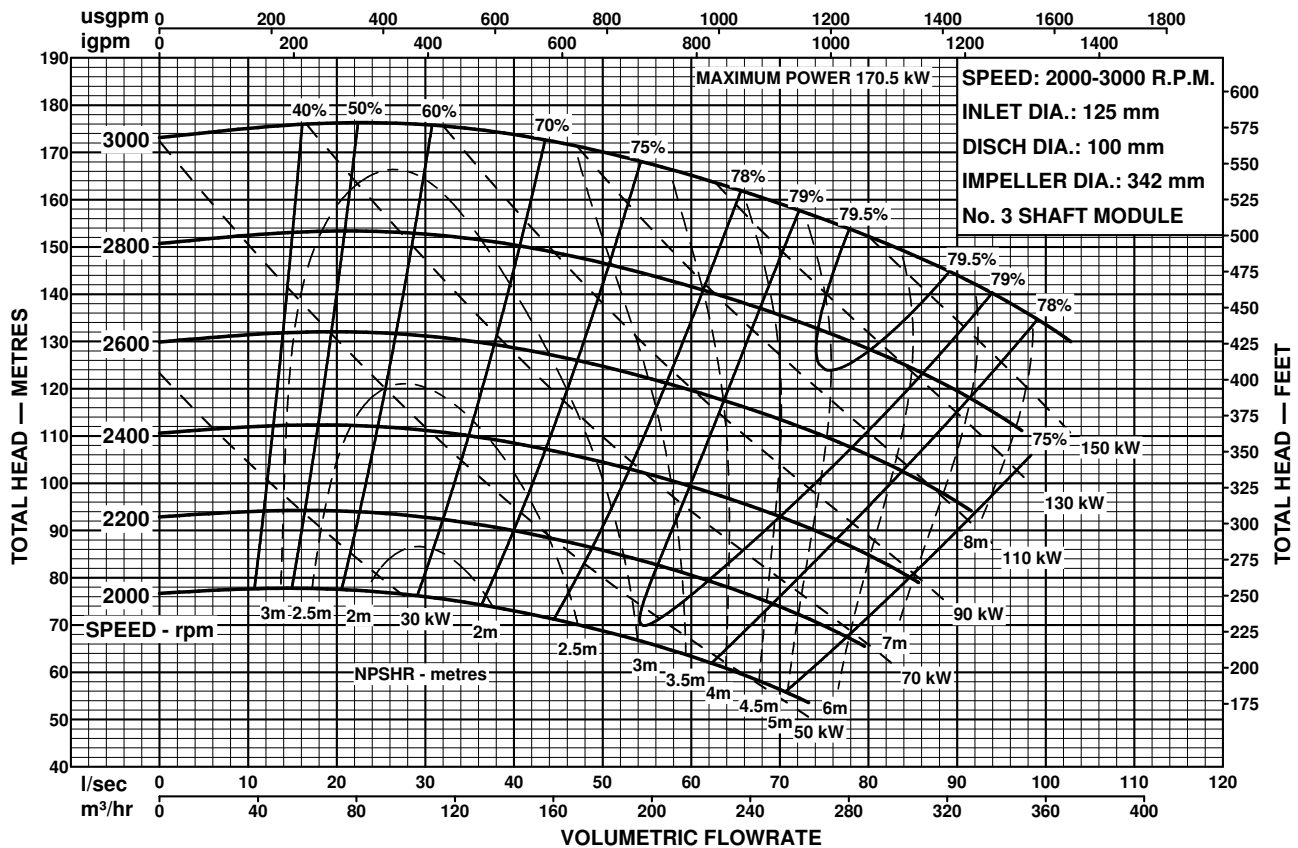
ISO5199

END SUCTION PUMPS

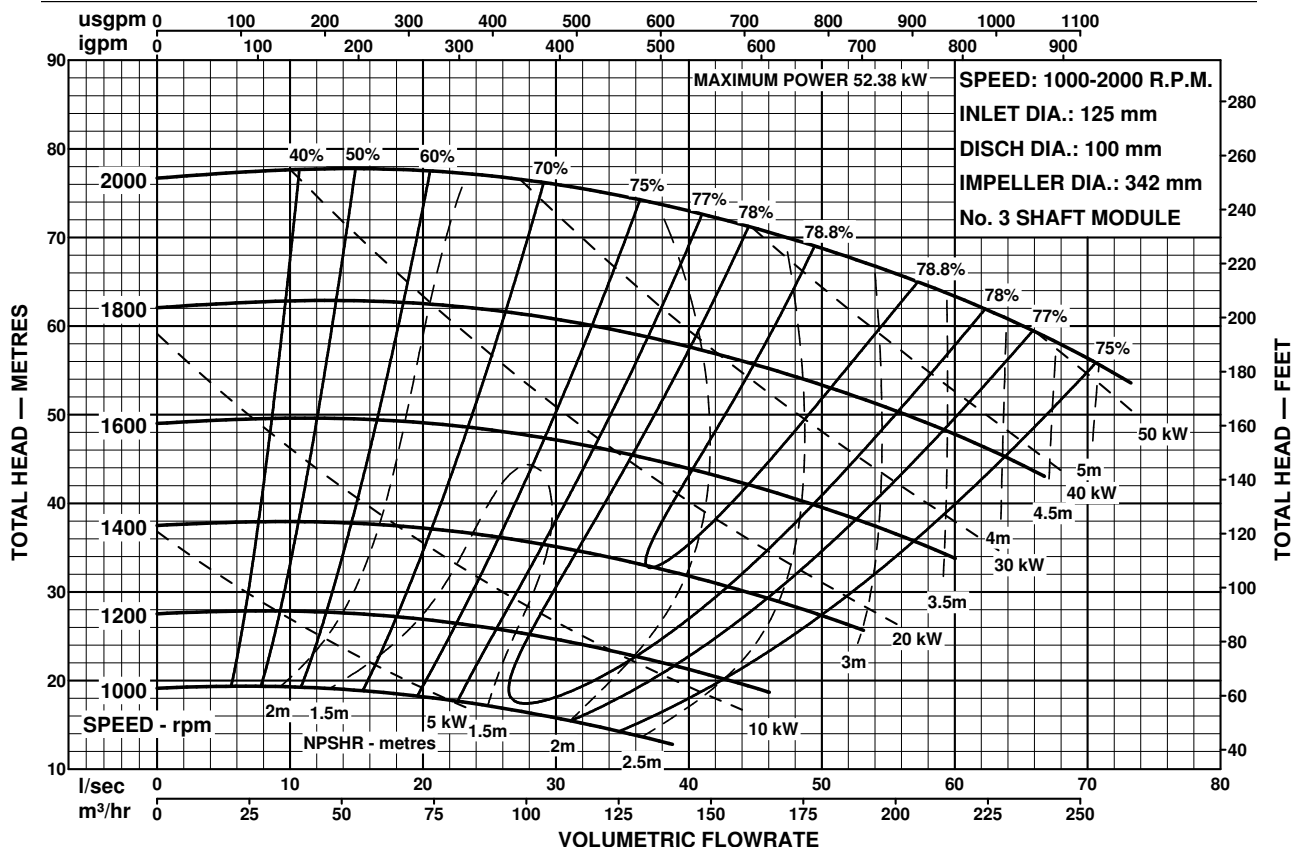
50Hz PERFORMANCE

CENTRIFUGAL PUMP PERFORMANCE DATA

MODEL  
**125x100-315**



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

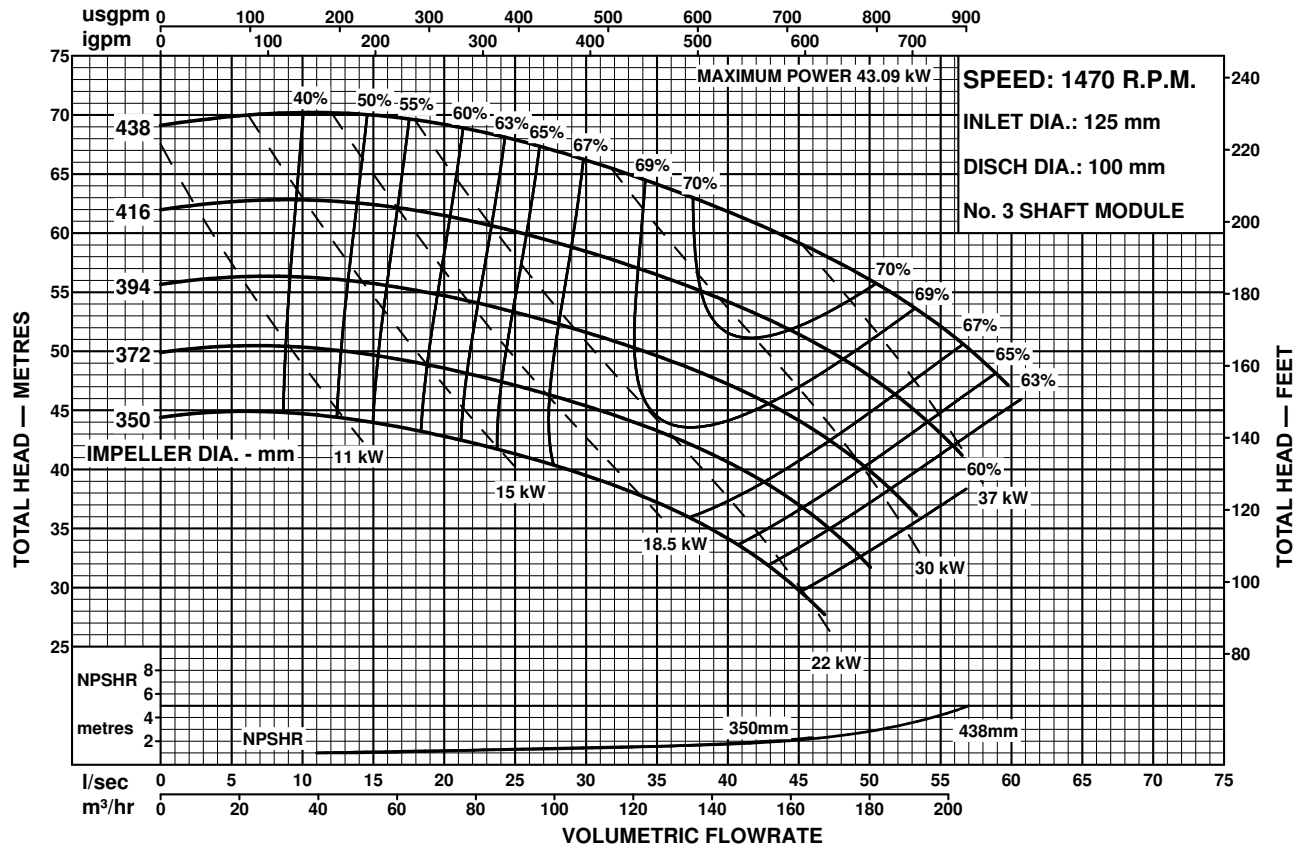
IS05199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
125x100-400

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



PENTAIR

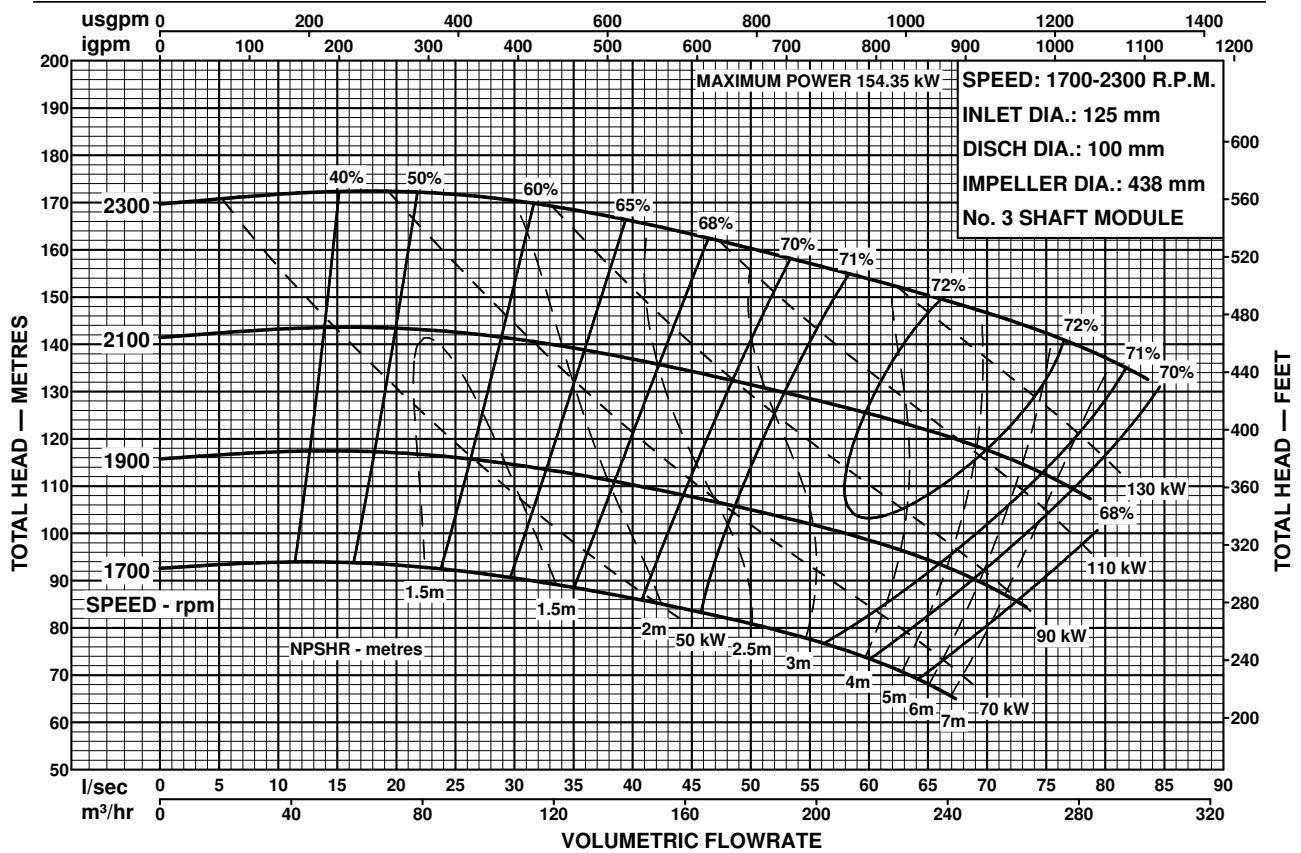
ISO5199

END SUCTION PUMPS

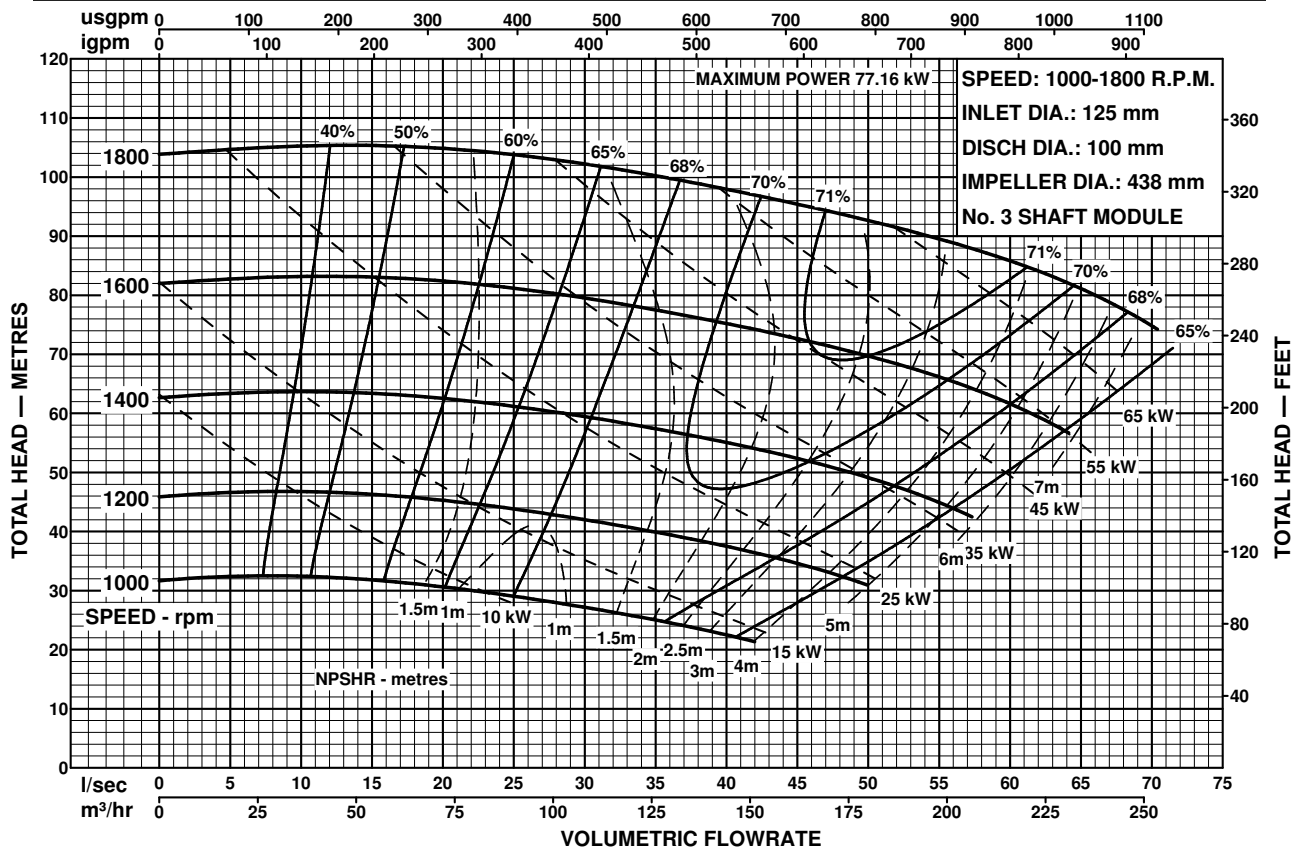
50Hz PERFORMANCE

CENTRIFUGAL PUMP PERFORMANCE DATA

MODEL  
**125x100-400**



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





# PENTAIR

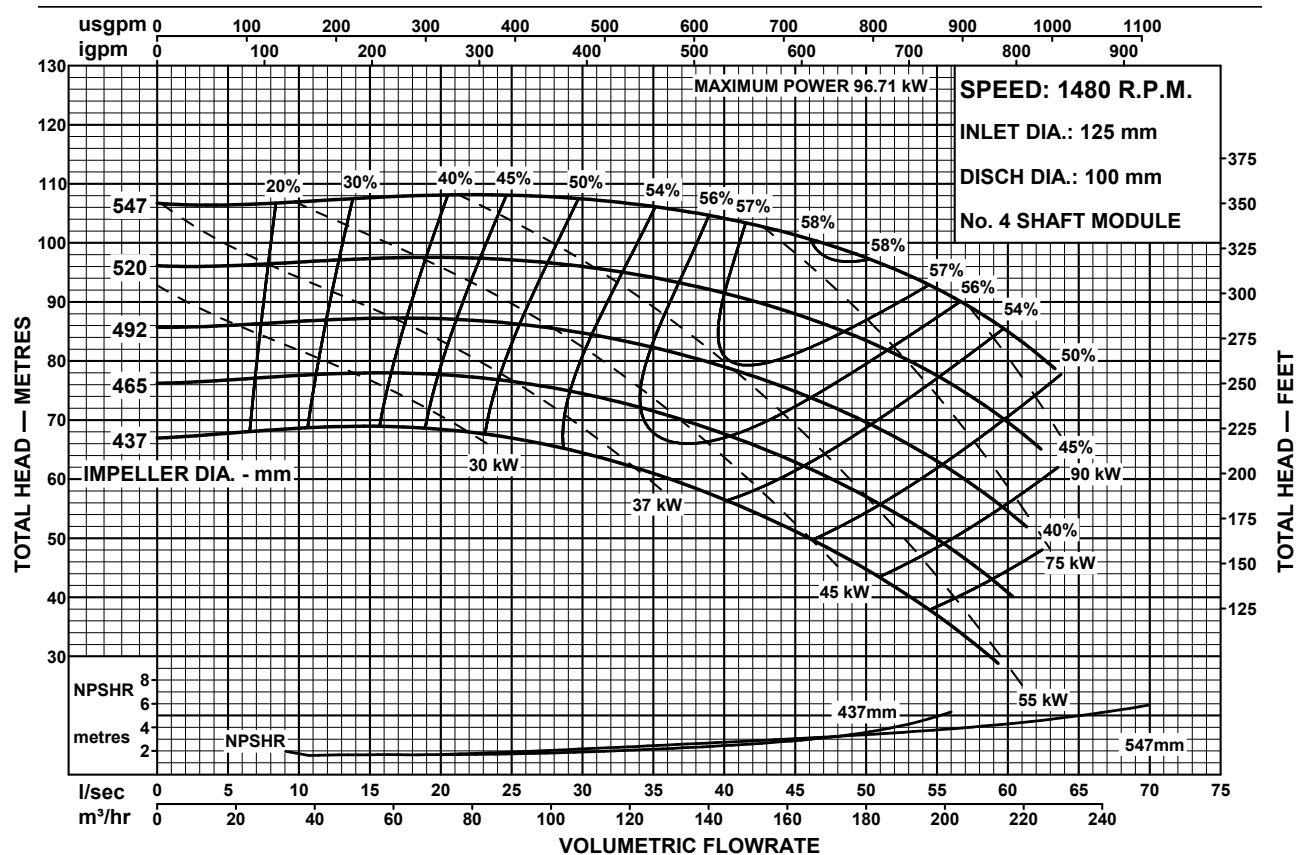
# ISO5199

END SUCTION PUMPS

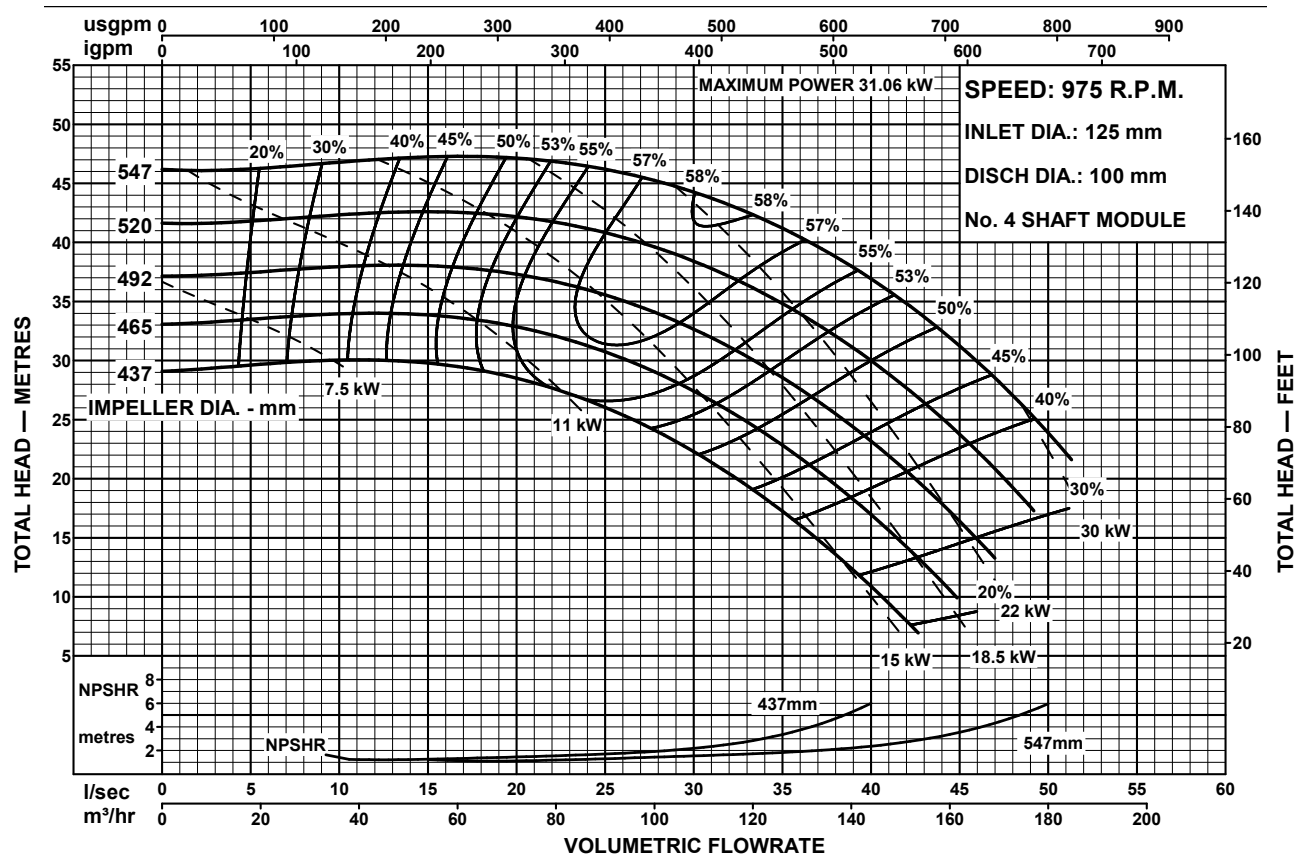
50Hz PERFORMANCE

MODEL  
**125x100-500**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.







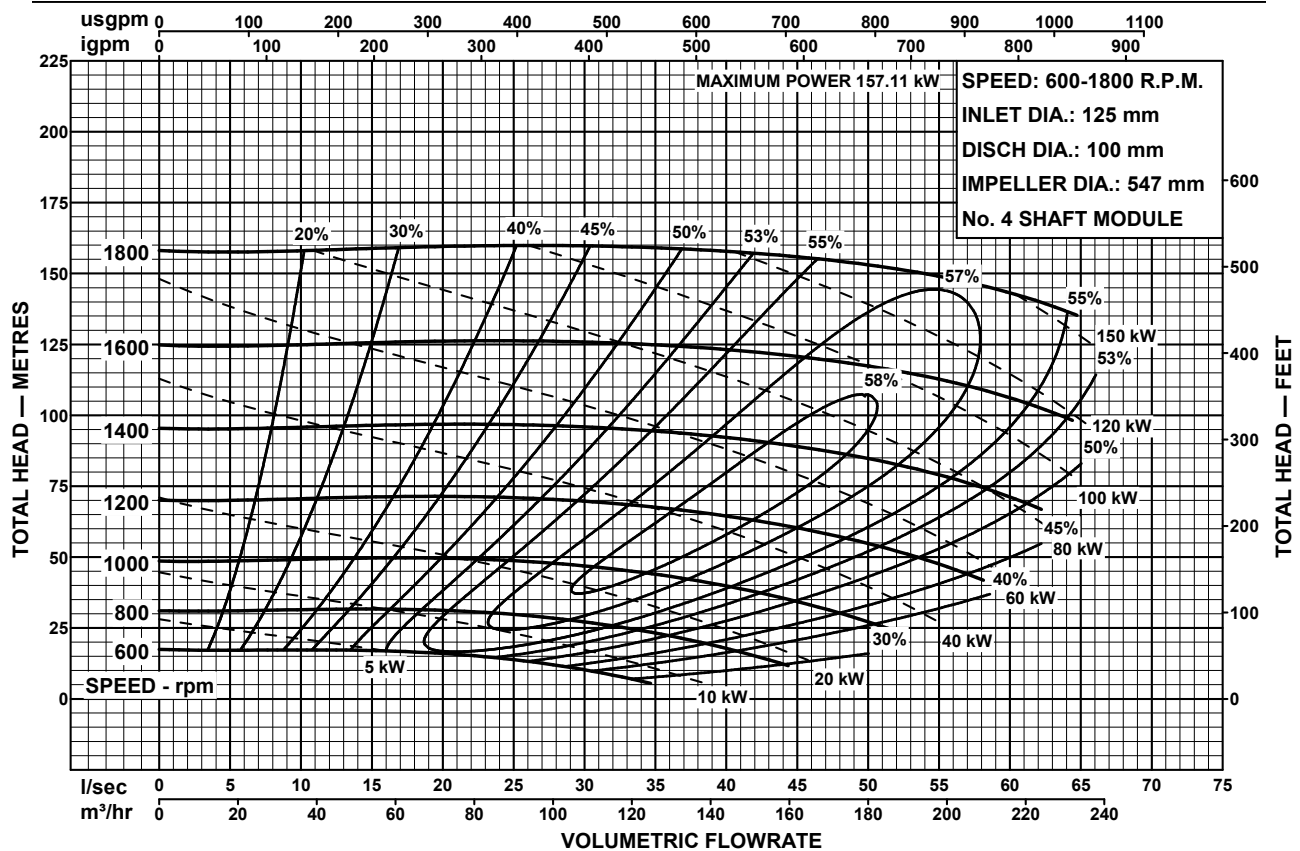
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**125x100-500**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



PENTAIR

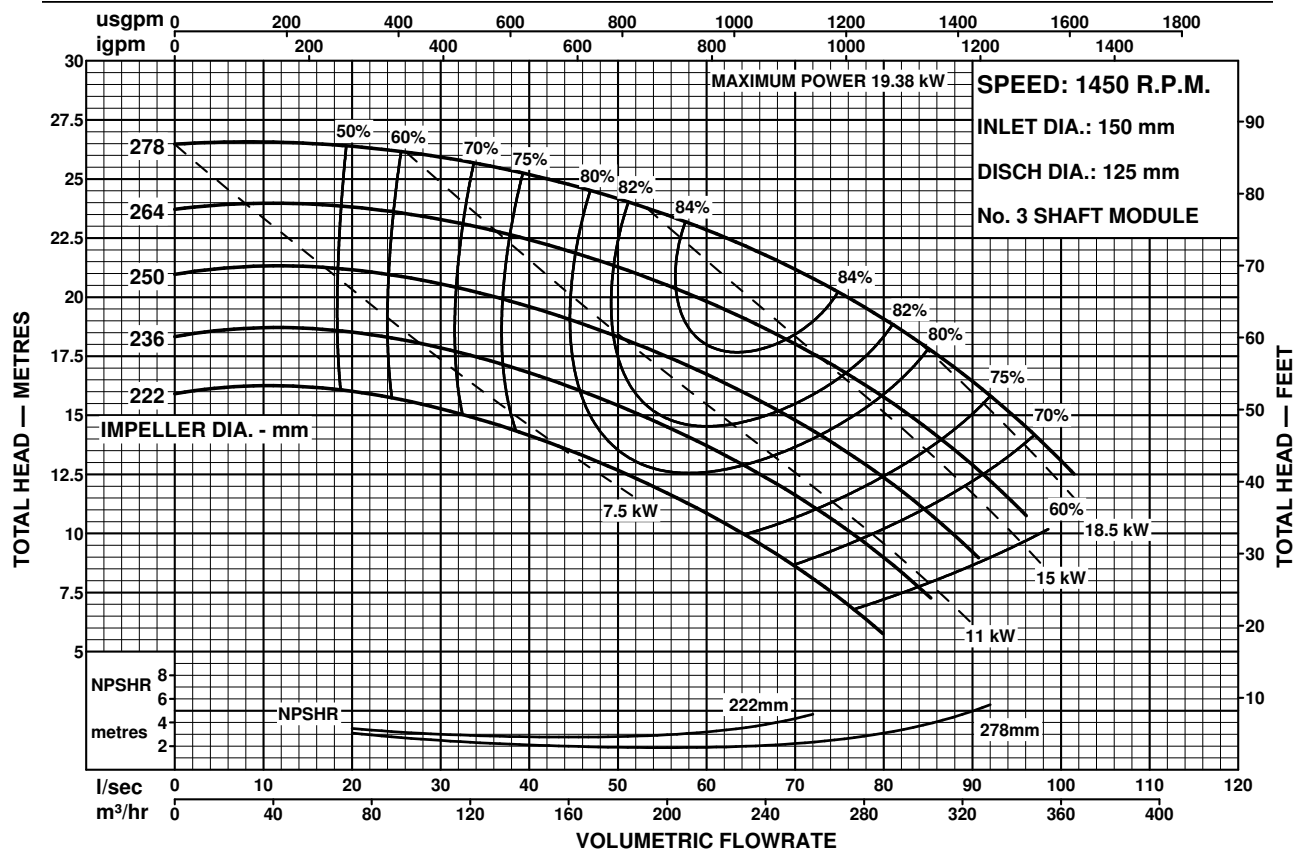
IS05199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
**150x125-250**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



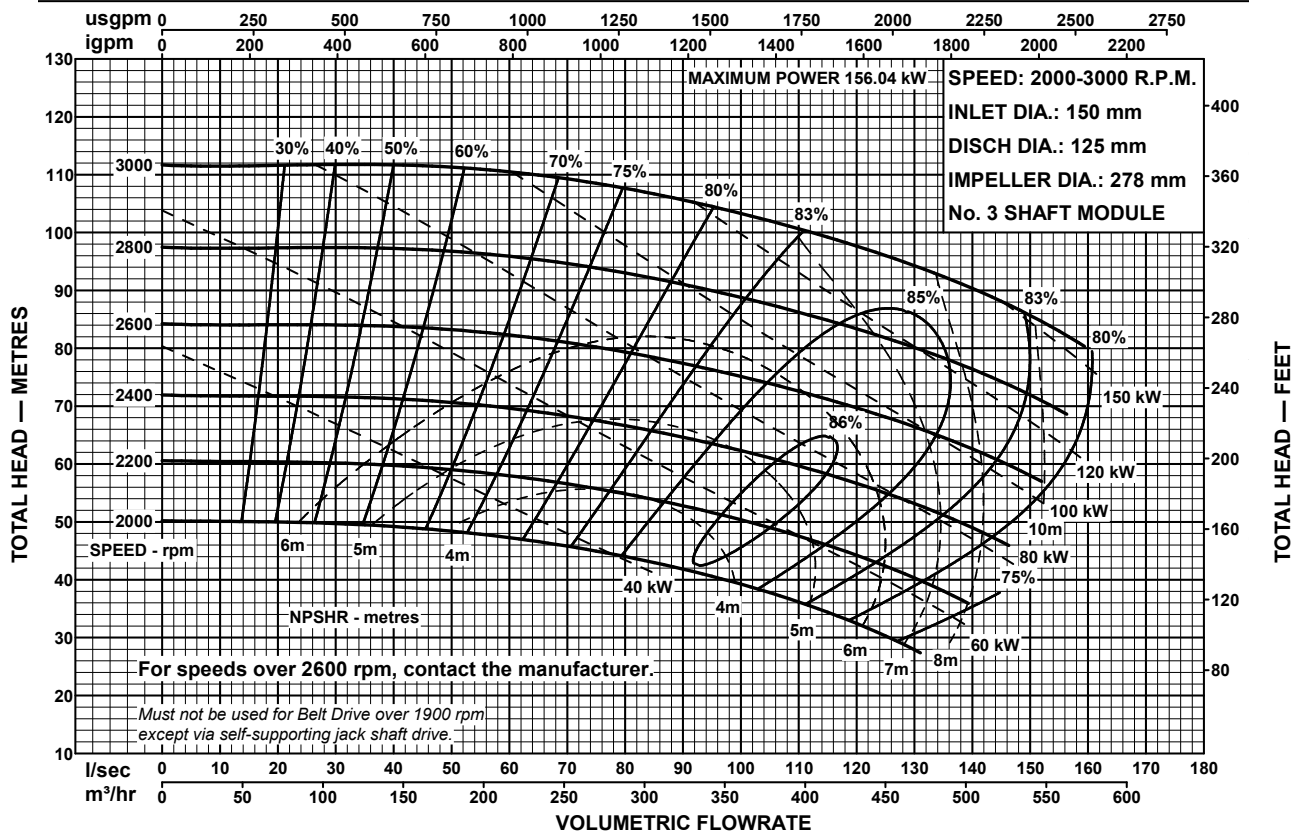
PENTAIR

ISO5199

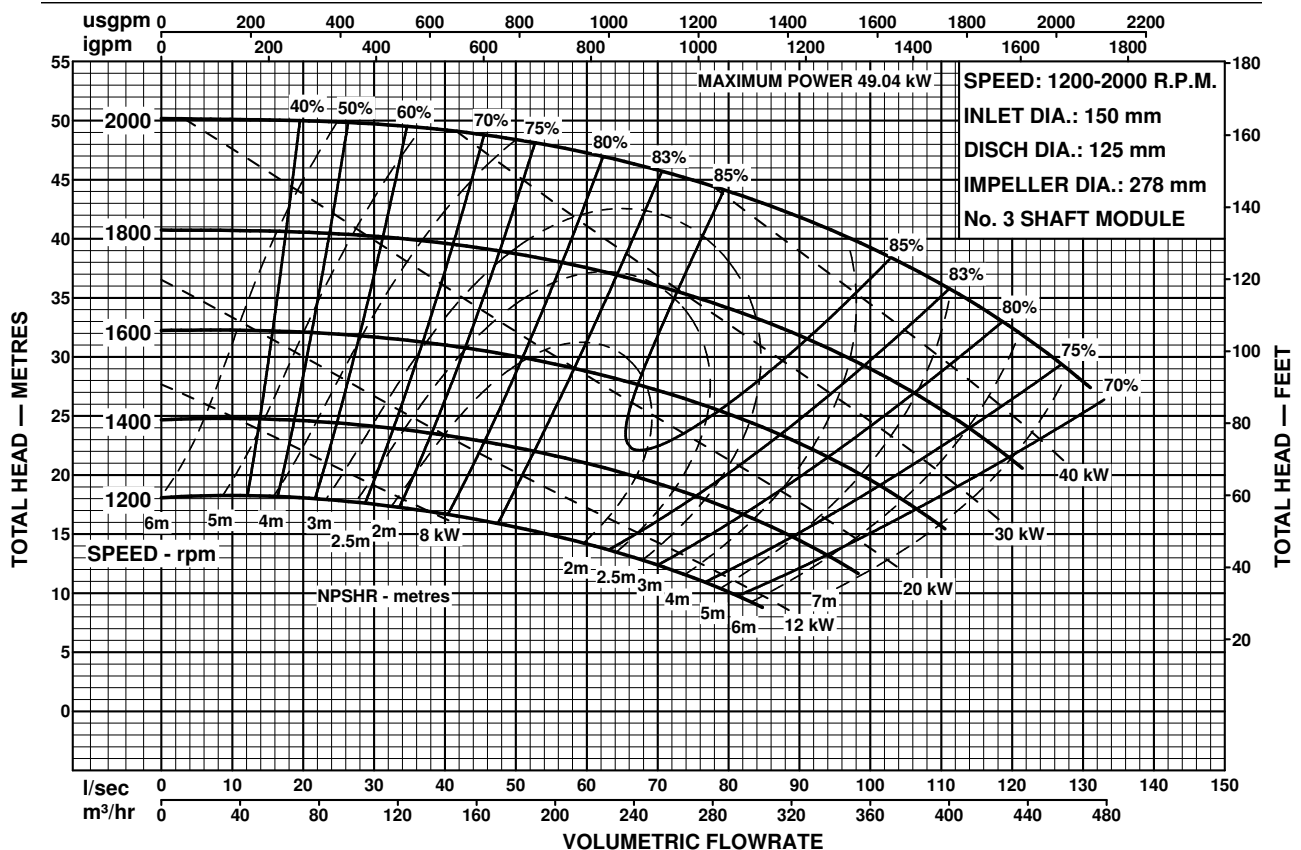
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**150x125-250**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

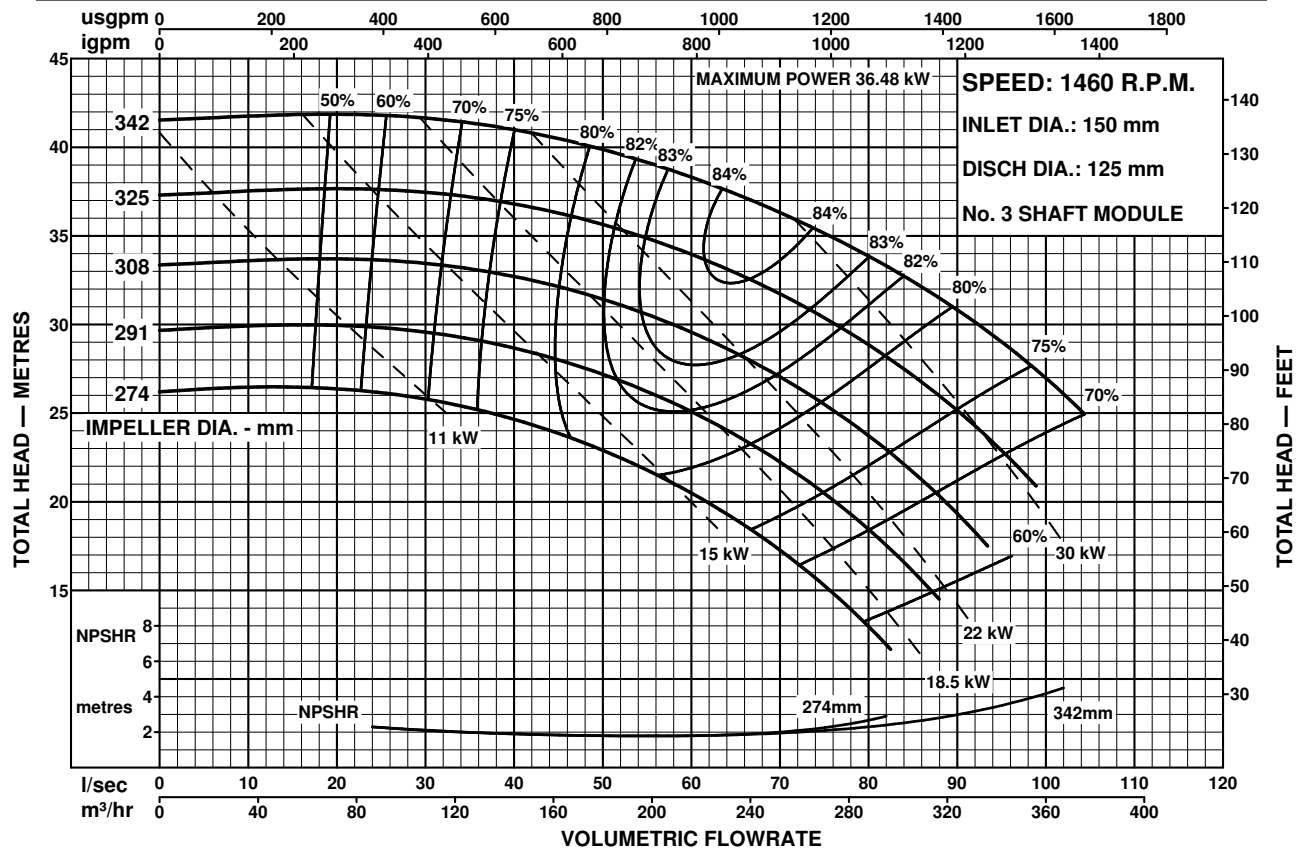
IS05199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
150x125-315

CENTRIFUGAL PUMP PERFORMANCE DATA





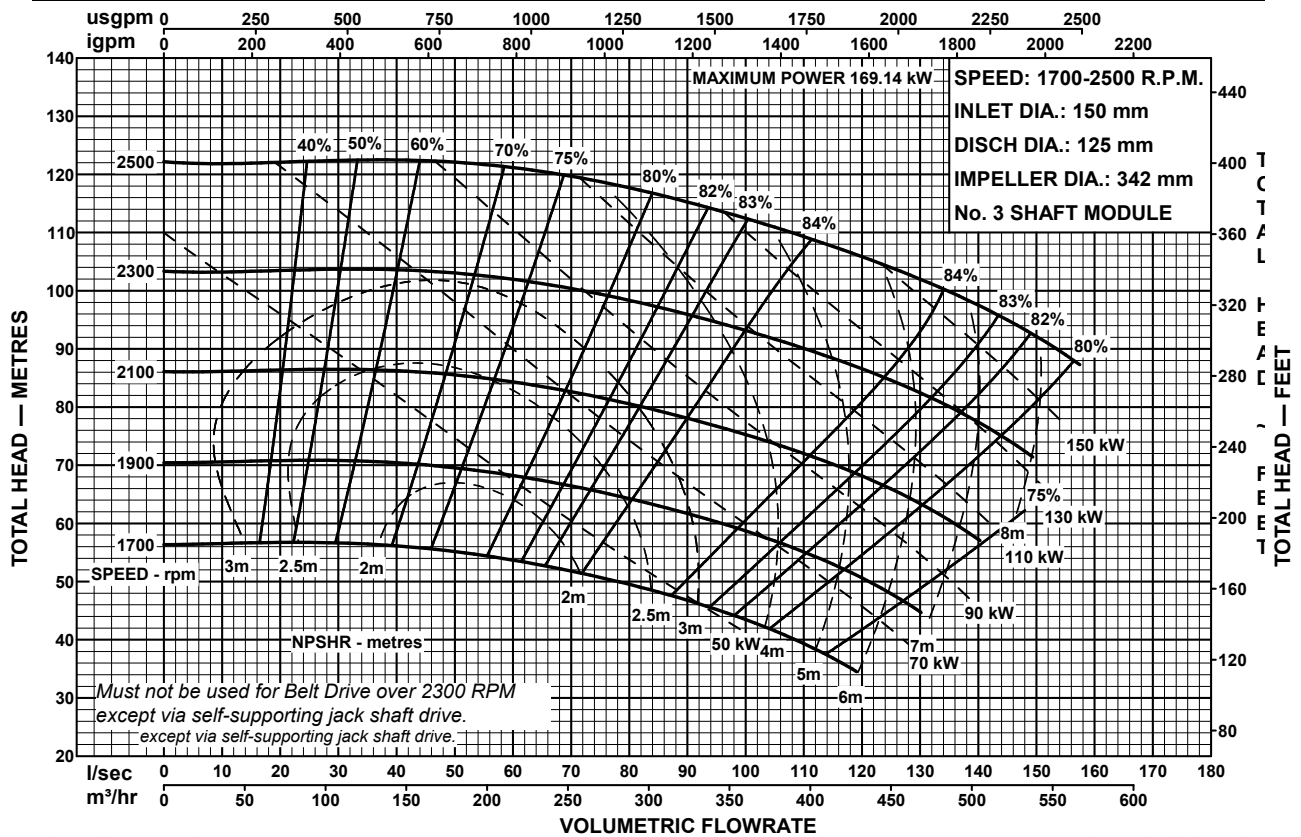
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**150x125-315**

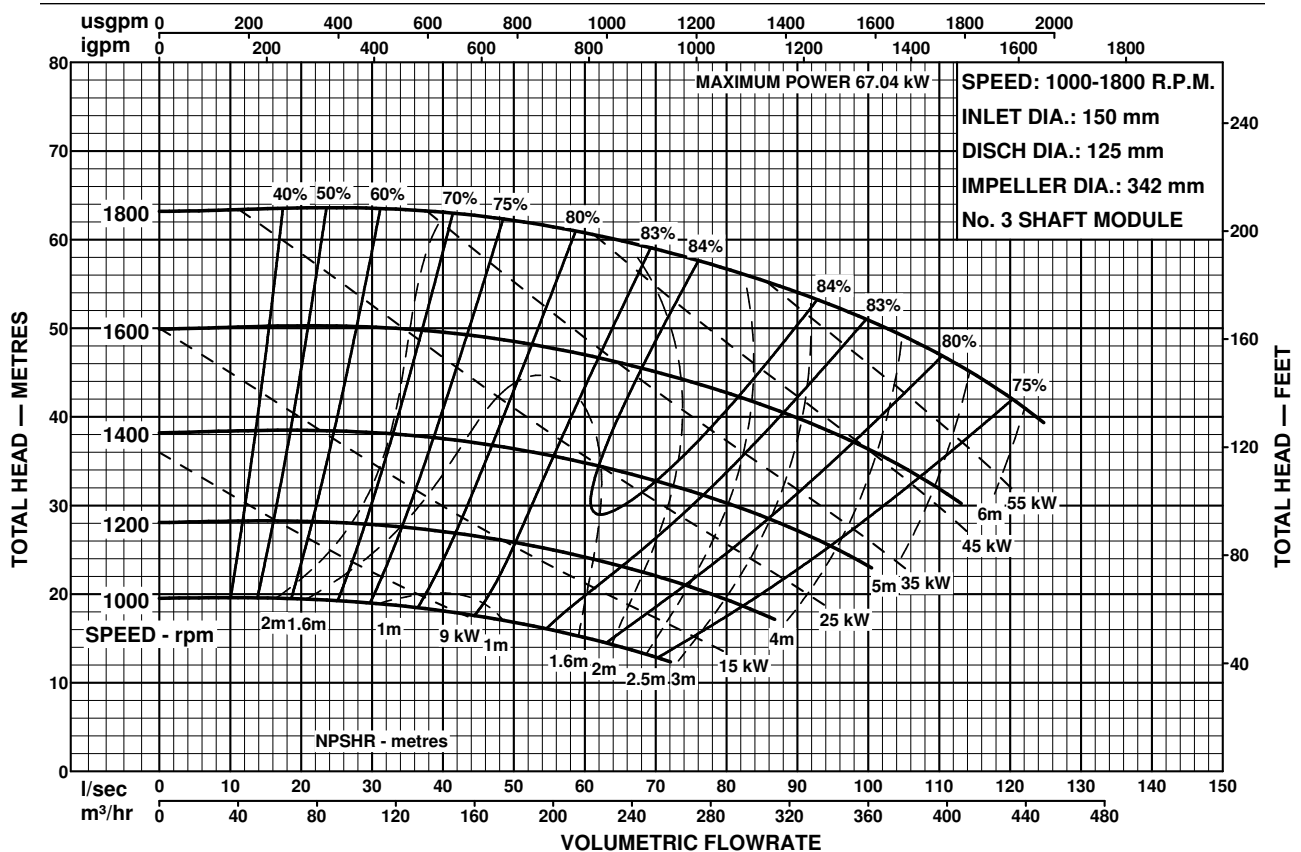
CENTRIFUGAL PUMP PERFORMANCE DATA



R CLEAN COLD WATER ONLY

Performance to AS2417 Grade 2 for clean, cold water only.

PUMP PERFORMANCE TO AS2417 GR2



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

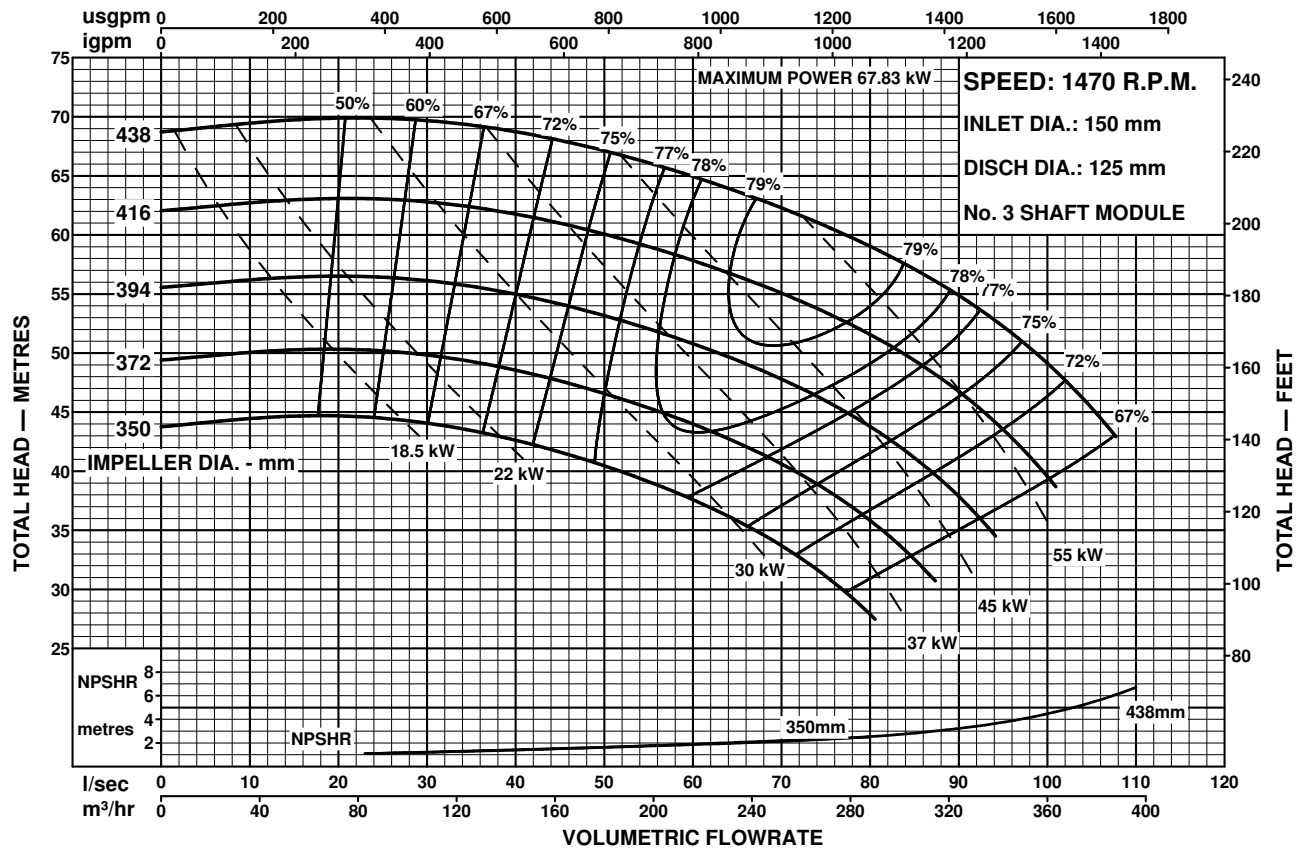
IS05199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
150x125-400

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



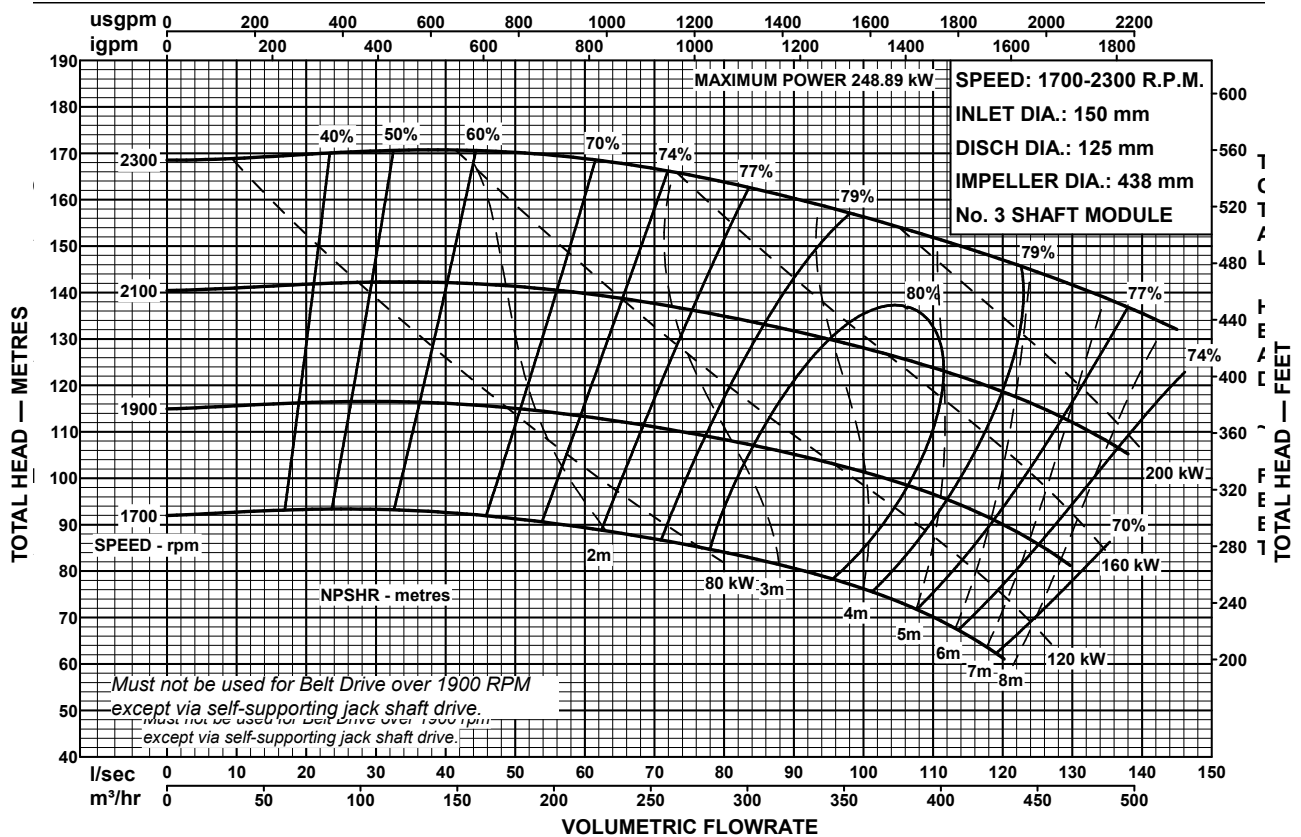
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

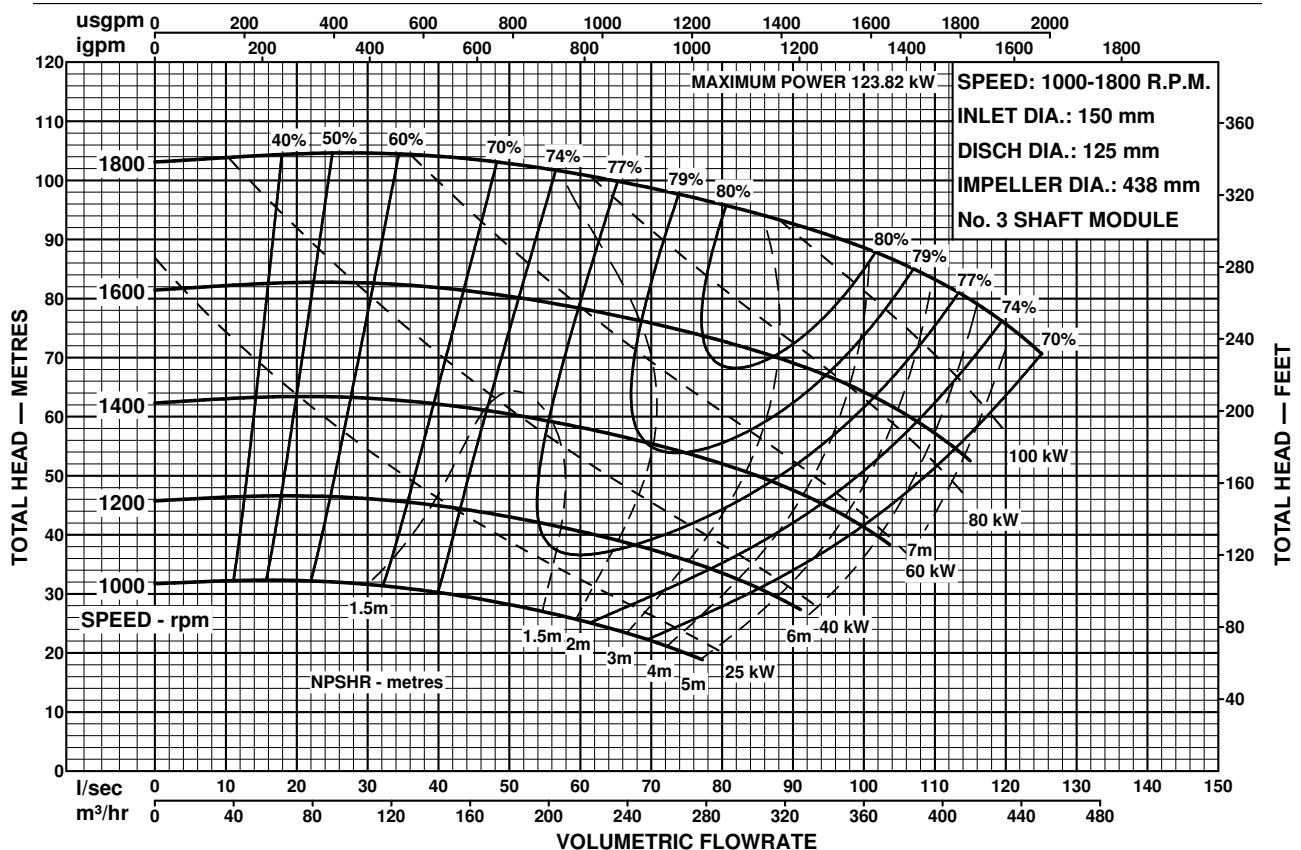
MODEL  
**150x125-400**

CENTRIFUGAL PUMP PERFORMANCE DATA



R CLEAN COLD WATER ONLY  
Performance to AS2417 Grade 2 for clean, cold water only.

PUMP PERFORMANCE TO AS2417 GR2



Performance to AS2417 Grade 2 for clean, cold water only.





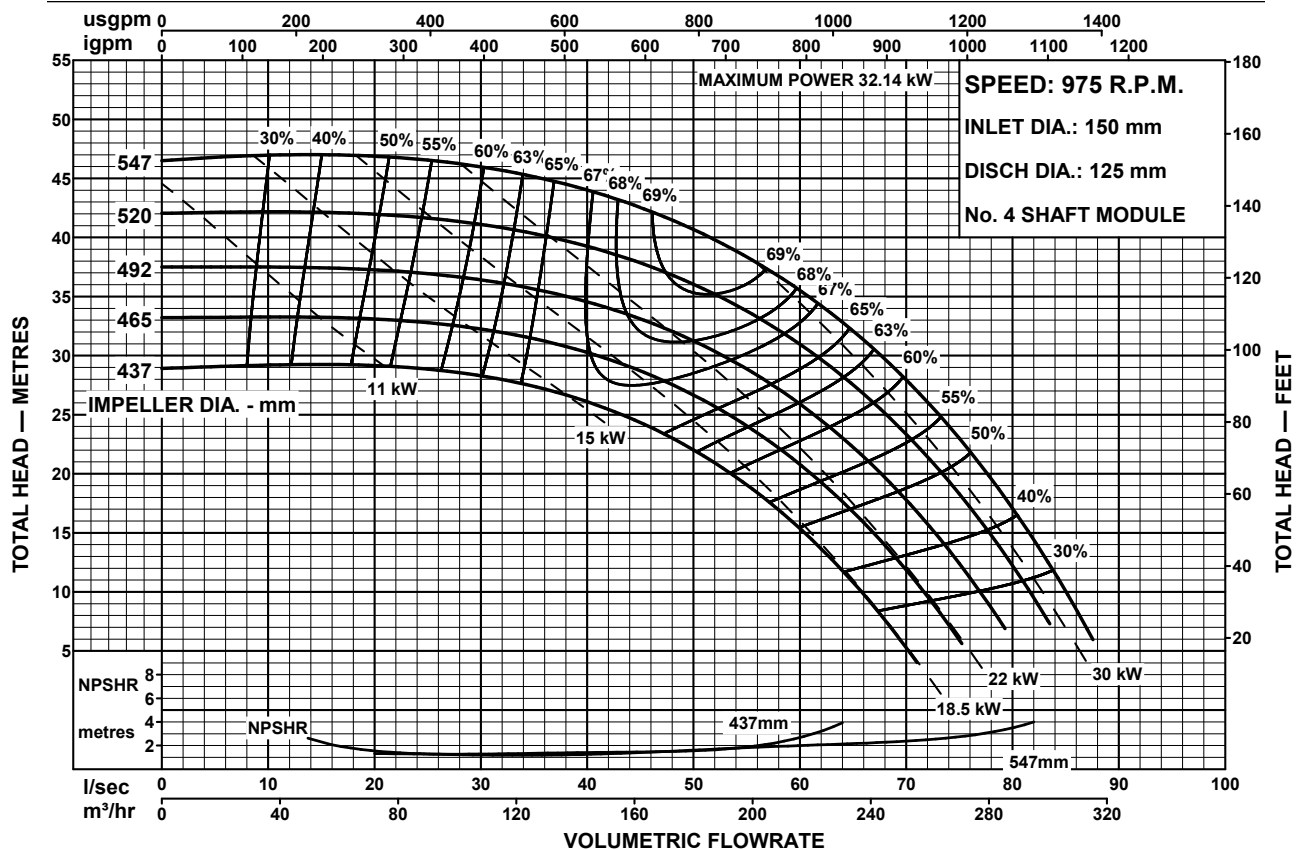
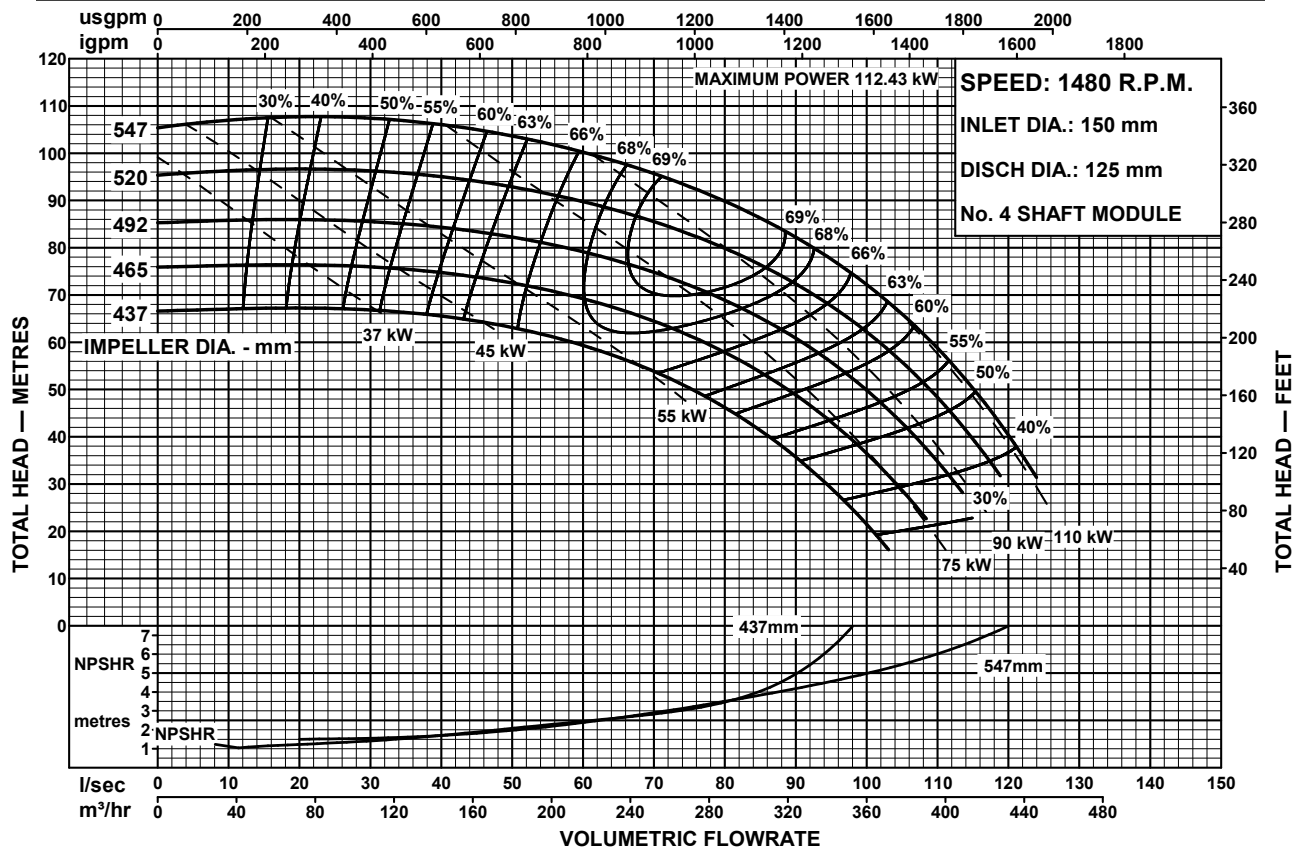
PENTAIR

# ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

CENTRIFUGAL PUMP PERFORMANCE DATA

MODEL  
**150x125-500**





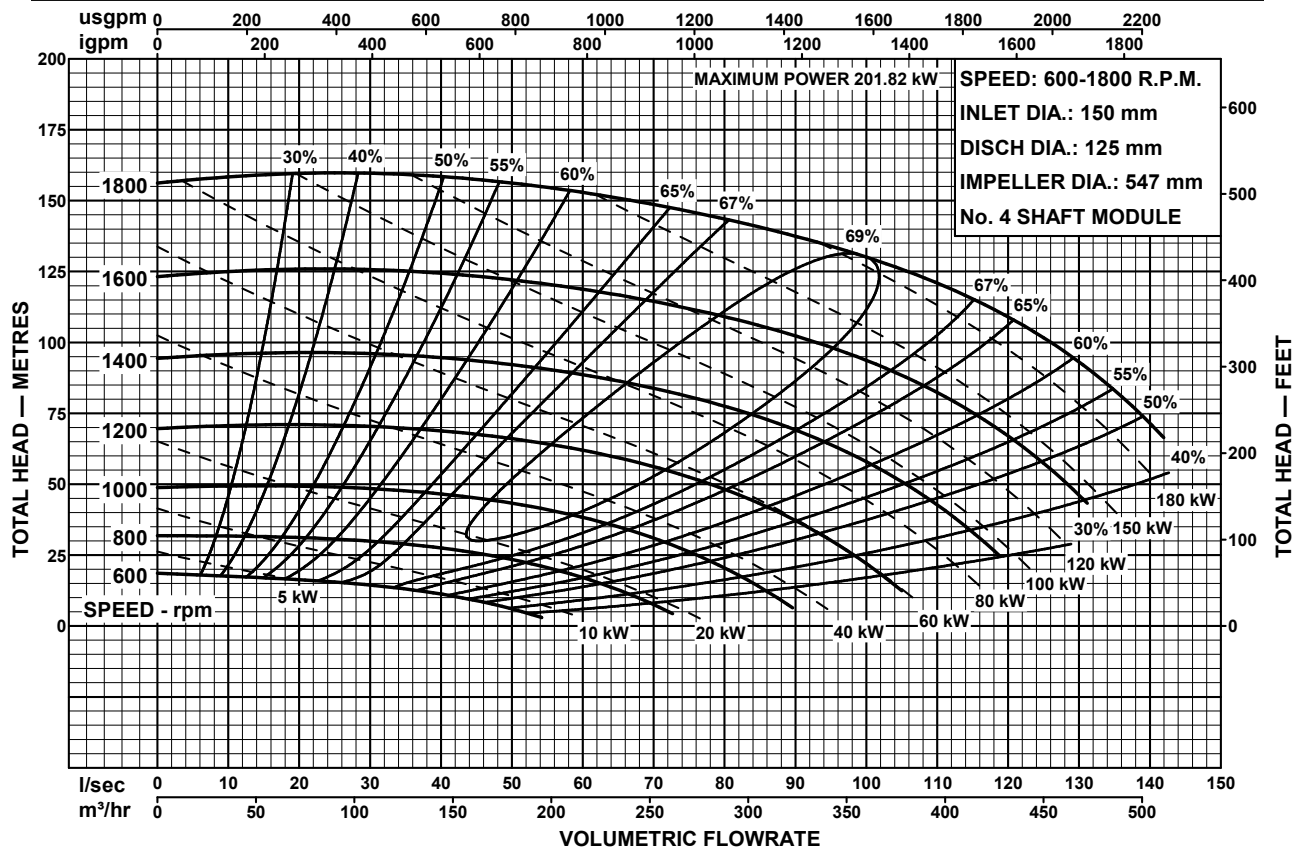
PENTAIR

IS05199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**150x125-500**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



PENTAIR

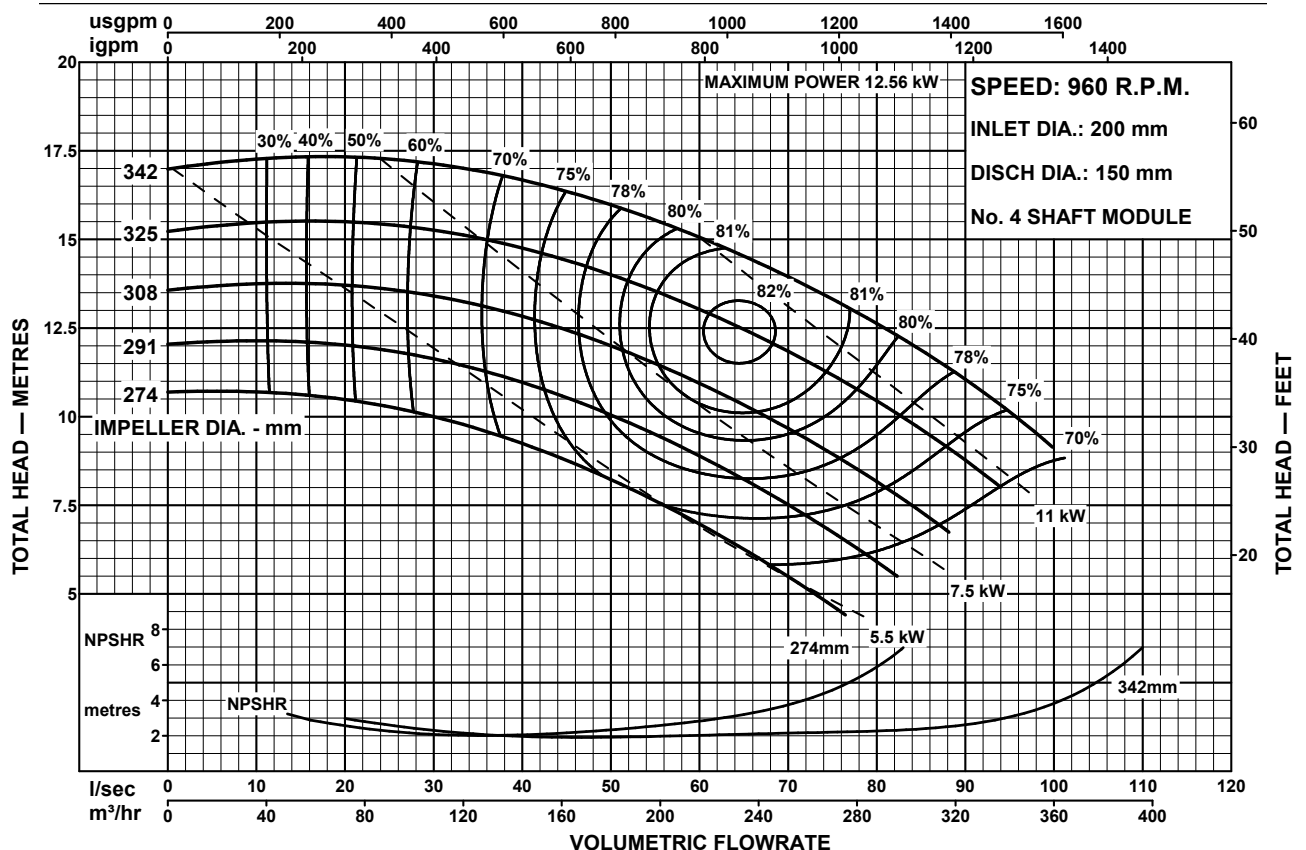
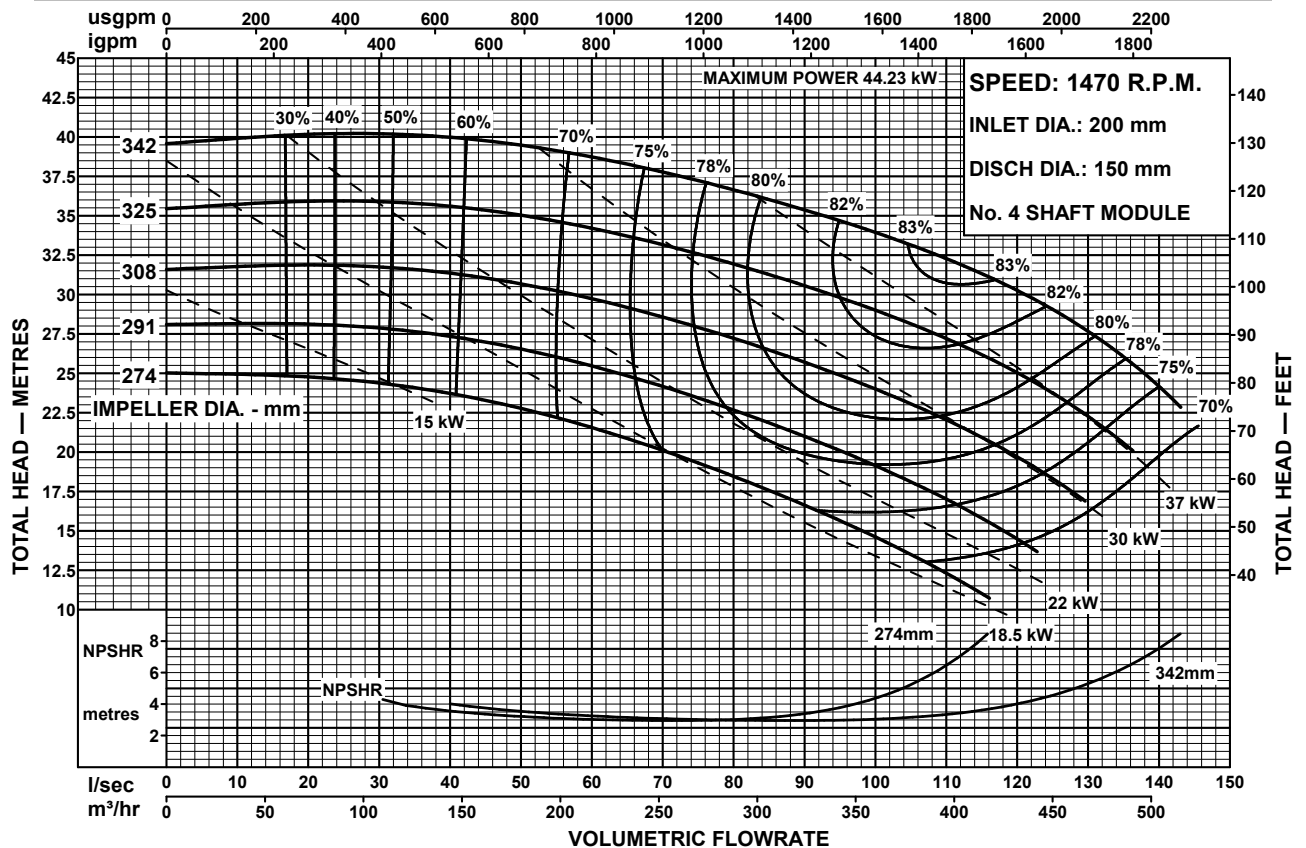
ISO5199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
200x150-315

CENTRIFUGAL PUMP PERFORMANCE DATA







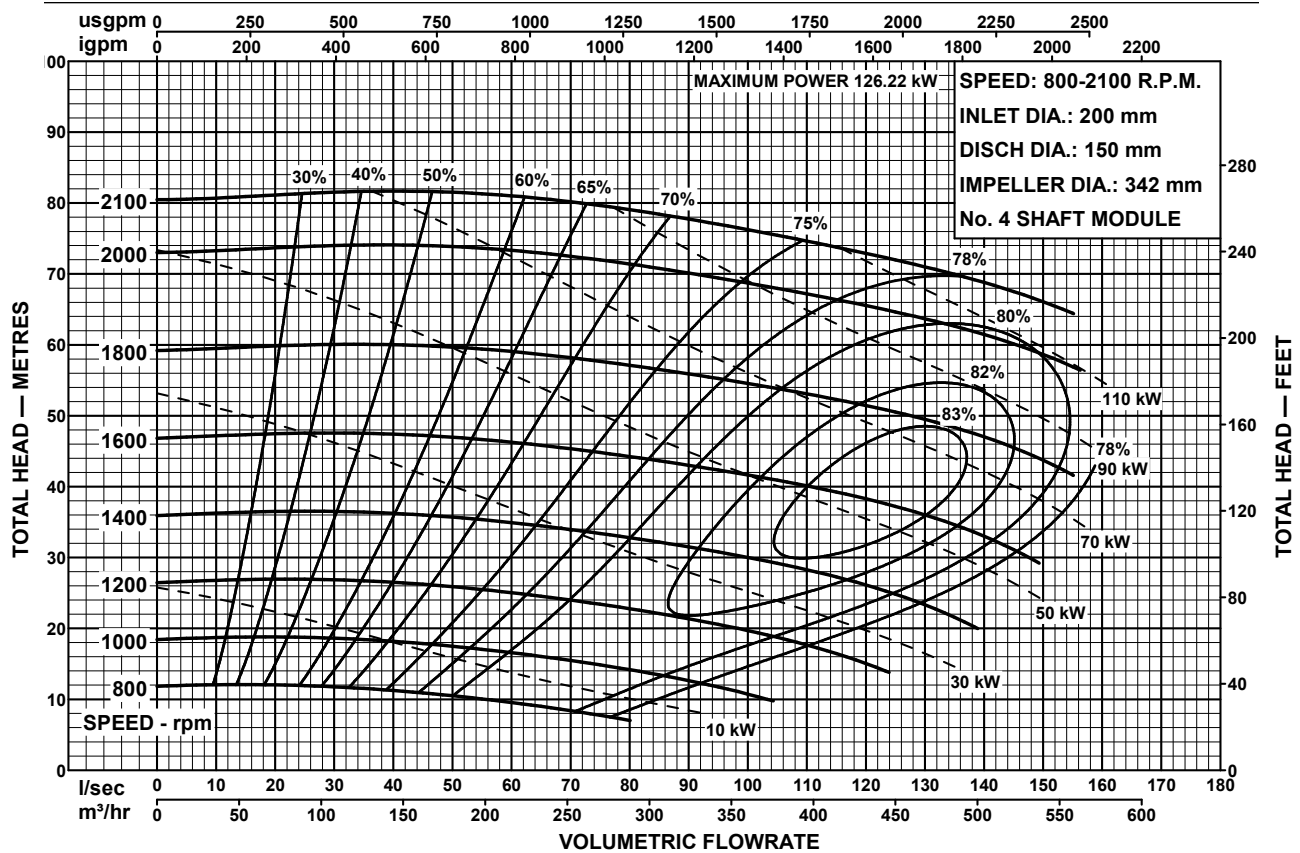
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**200x150-315**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



PENTAIR

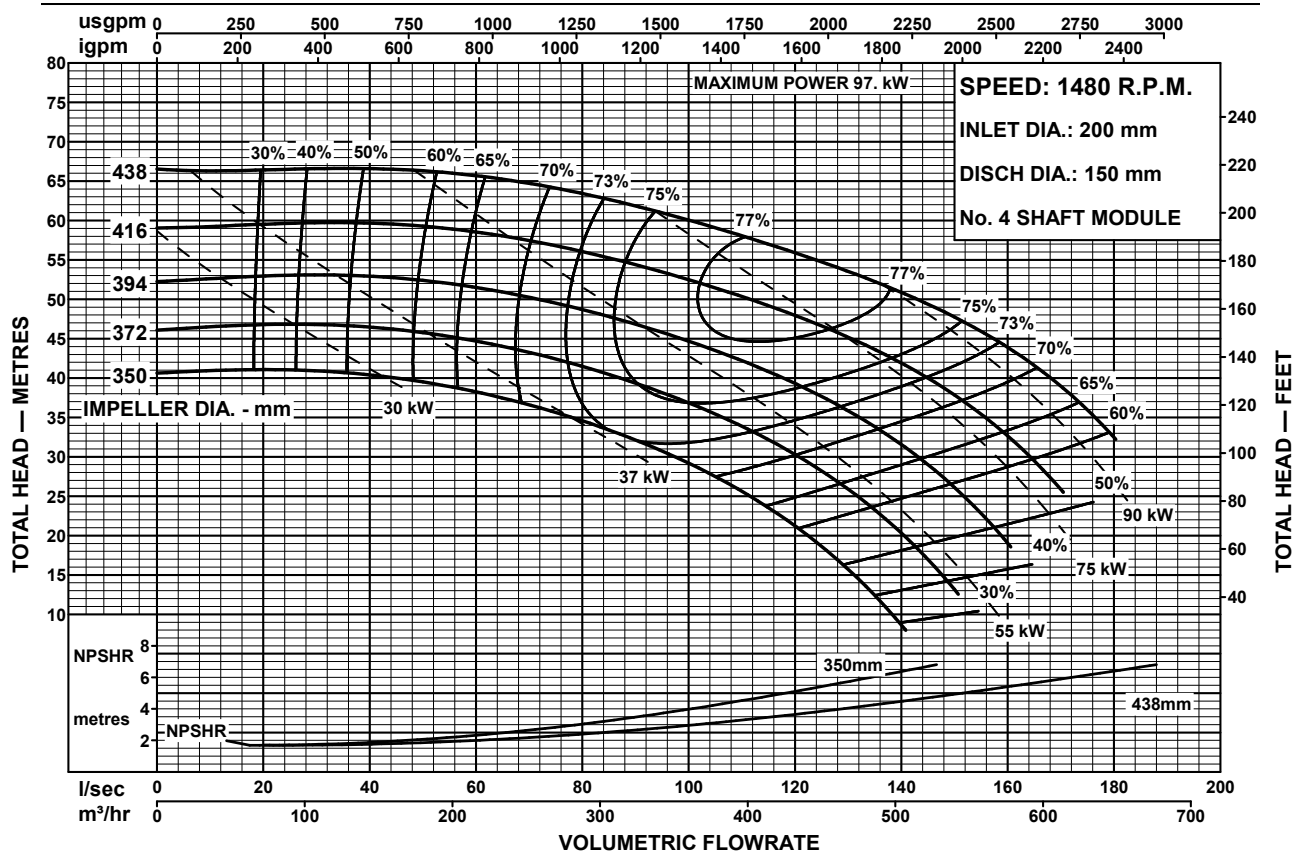
ISO5199

END SUCTION PUMPS

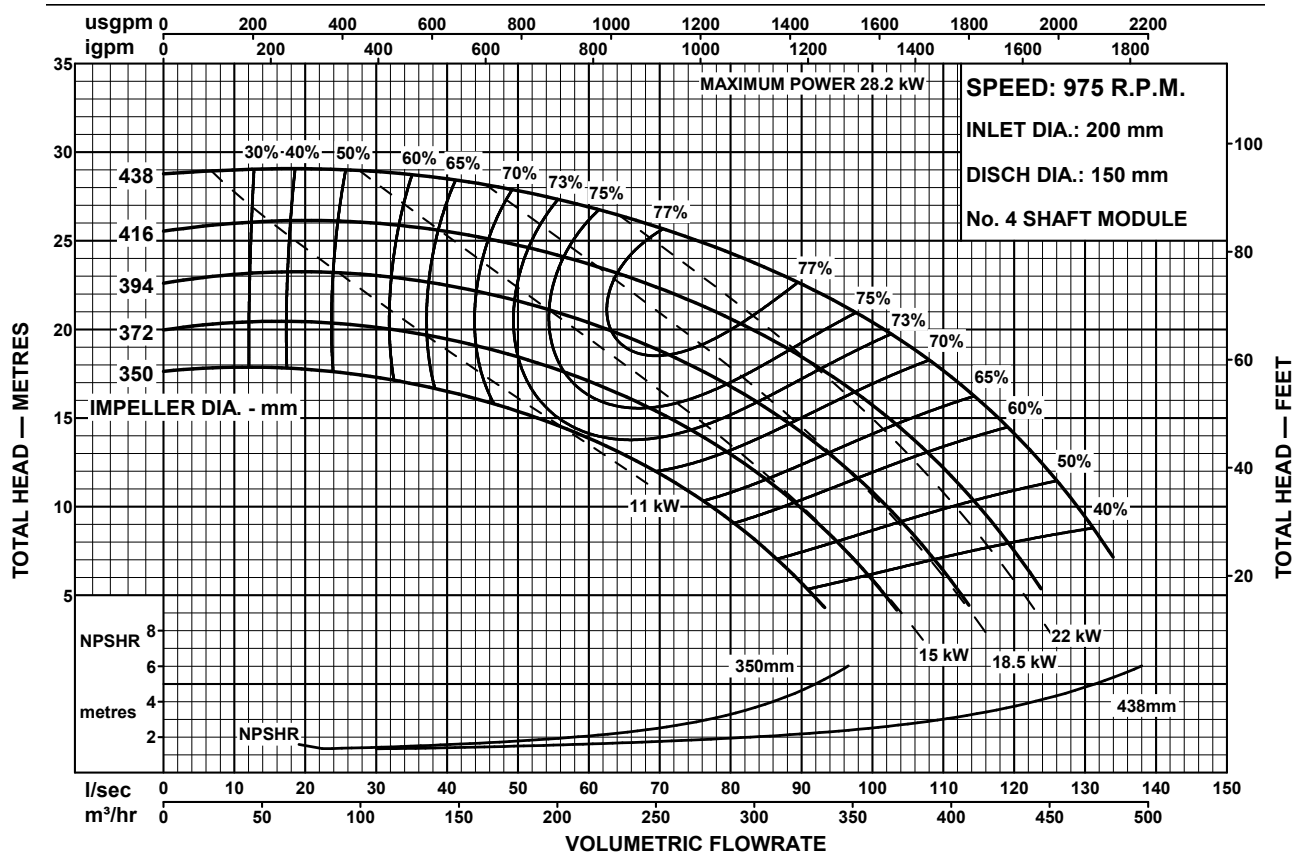
50Hz PERFORMANCE

MODEL  
200x150-400

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





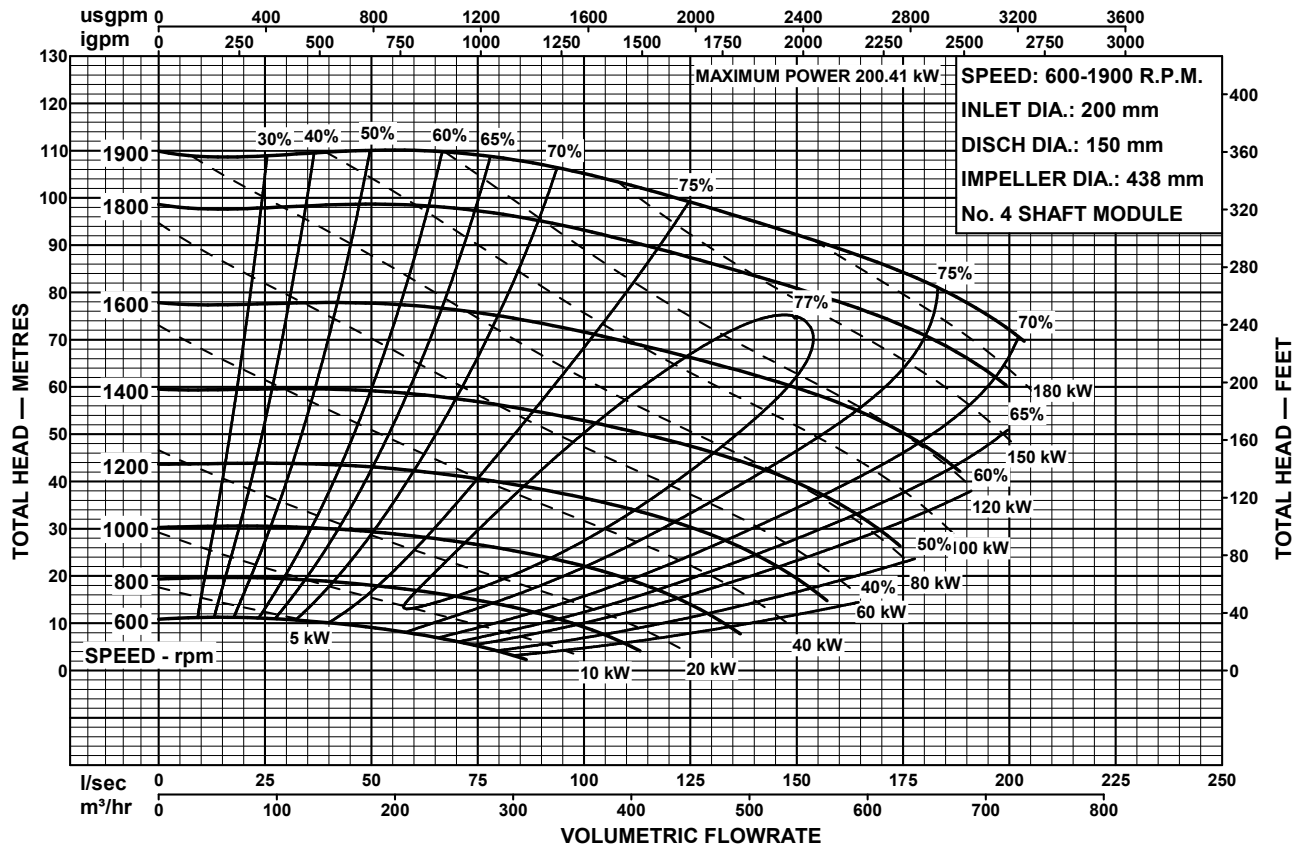
PENTAIR

ISO5199

END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**200x150-400**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



PENTAIR

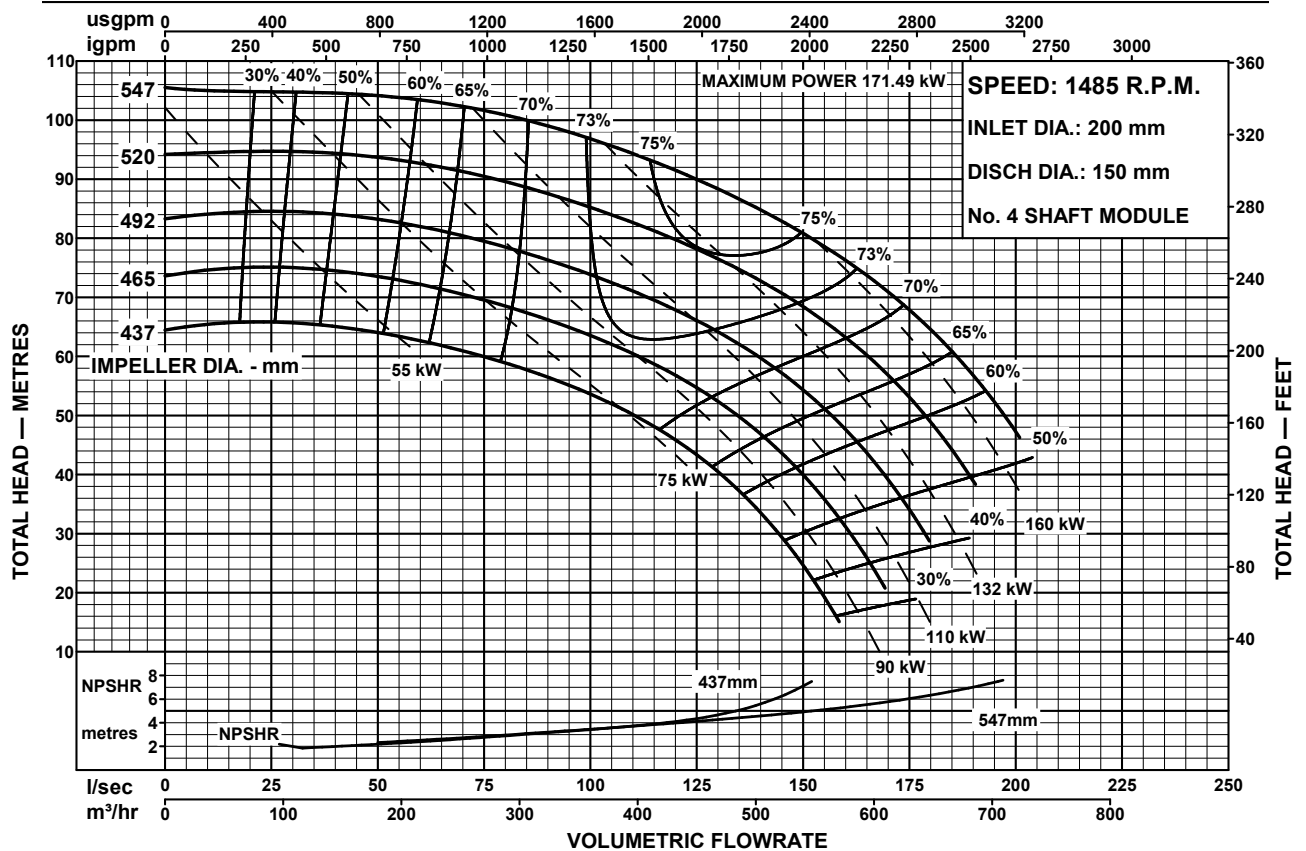
ISO5199

END SUCTION PUMPS

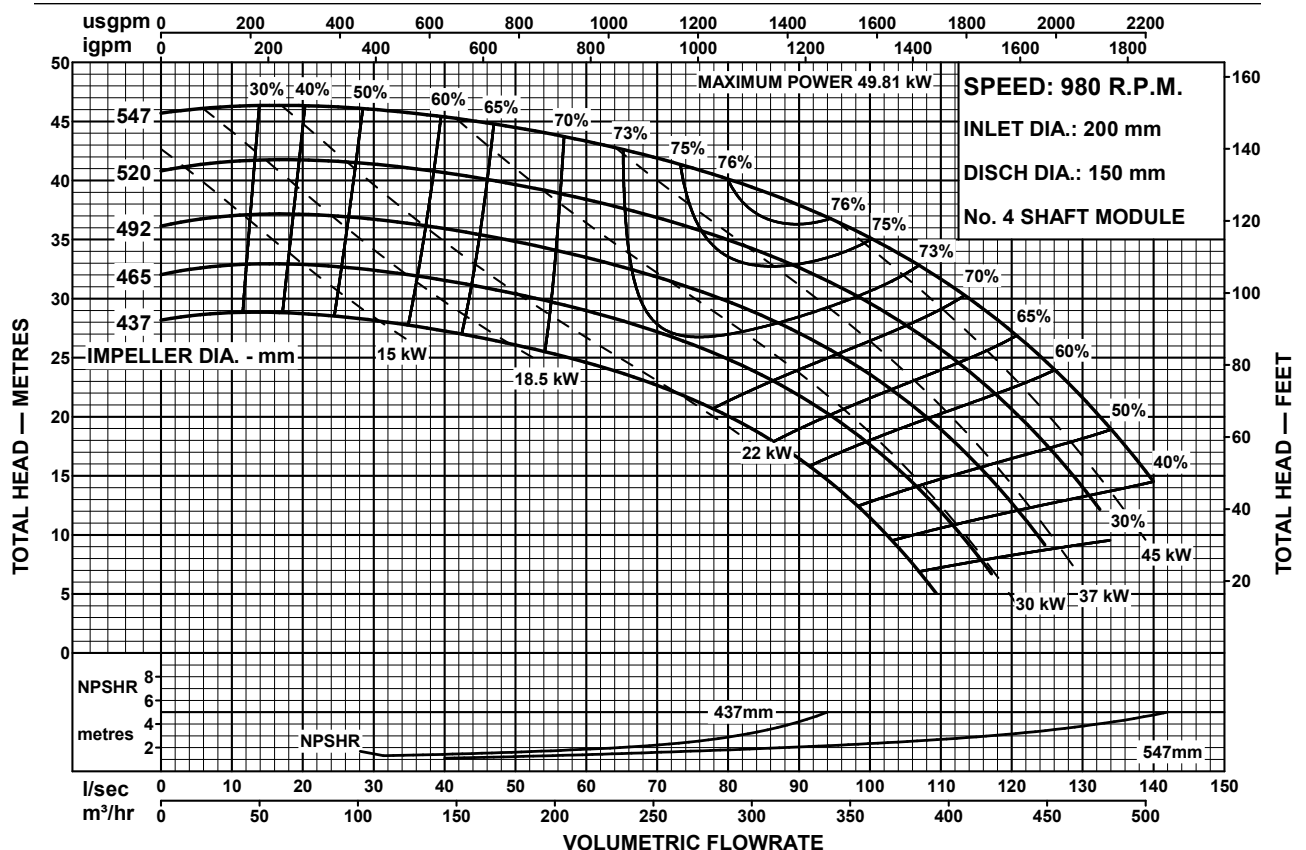
50Hz PERFORMANCE

MODEL  
200x150-500

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





PENTAIR

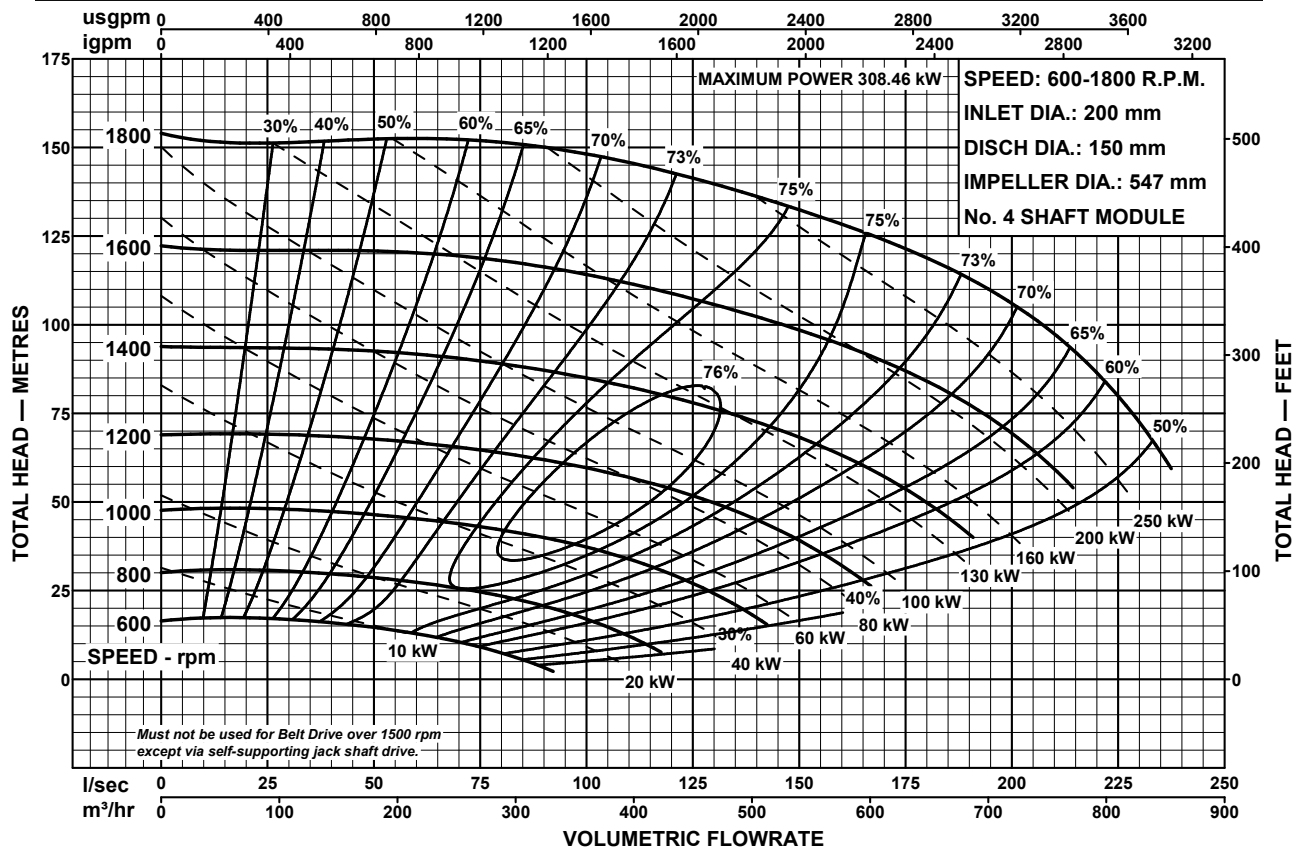
ISO5199

END SUCTION PUMPS

50Hz PERFORMANCE

MODEL  
200x150-500

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



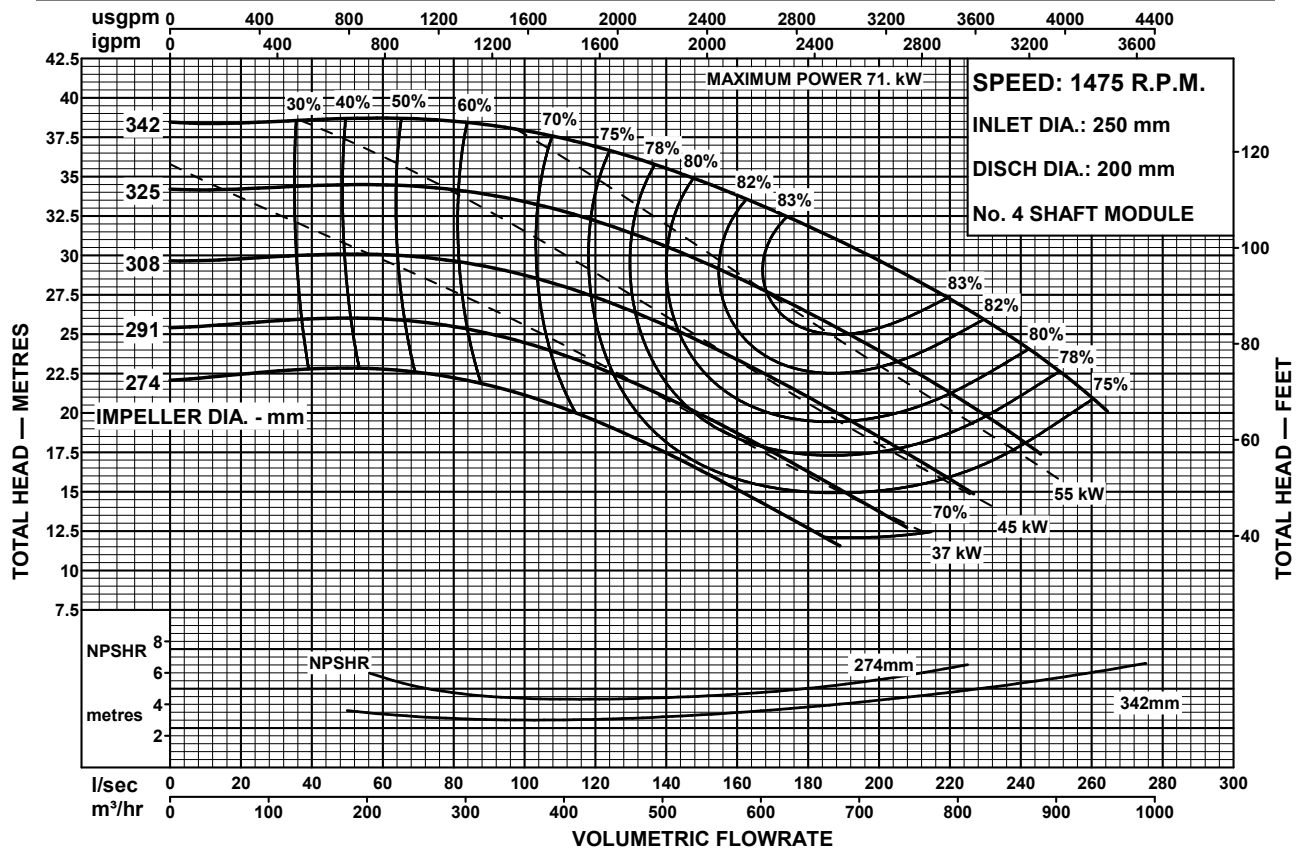


PENTAIR

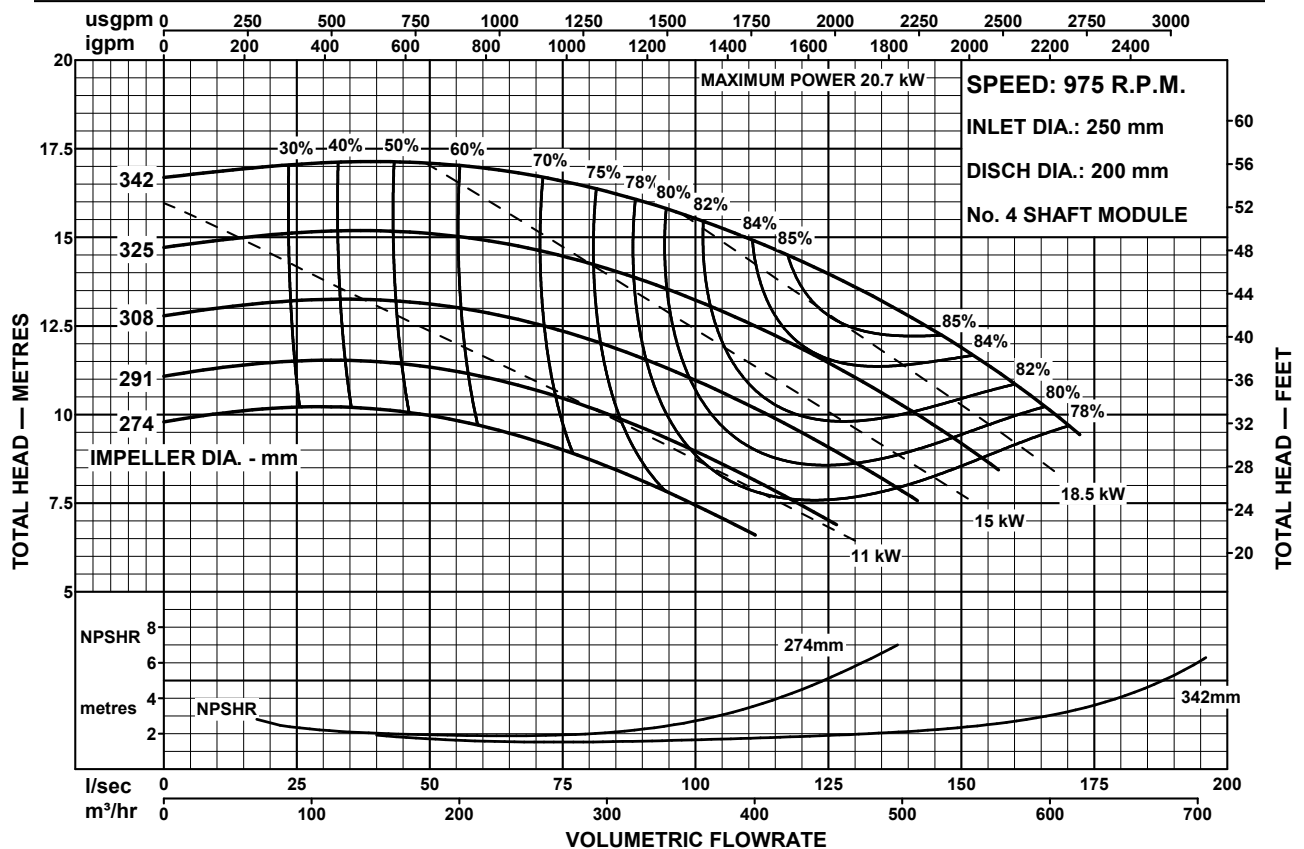
IS05199  
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**250x200-315**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Performance to AS2417 Grade 2 for clean, cold water only.





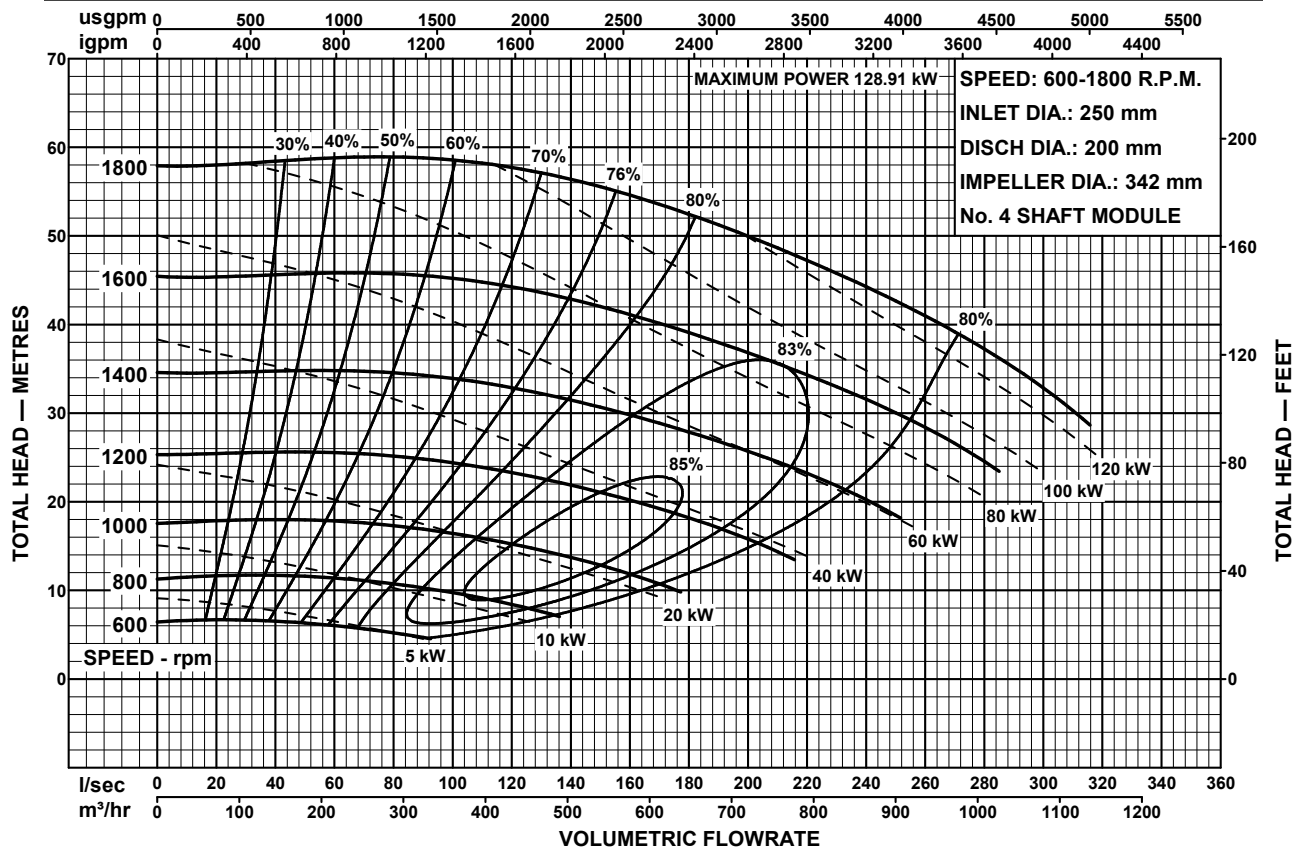
PENTAIR

IS05199

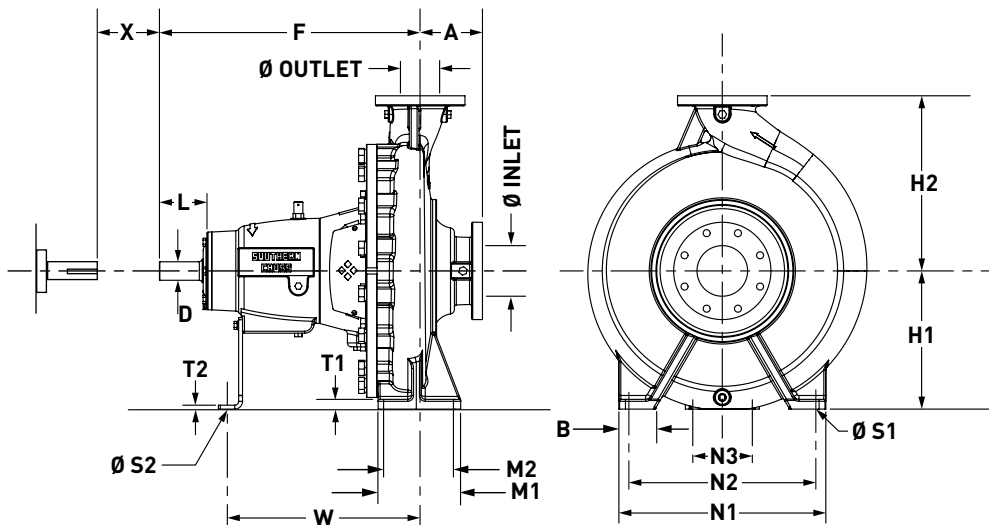
END SUCTION PUMPS  
50Hz PERFORMANCE

MODEL  
**250x200-315**

CENTRIFUGAL PUMP PERFORMANCE DATA



Performance to AS2417 Grade 2 for clean, cold water only.



Standard Flange Drilling to  
AS2129 -1982 Table "E".

Other drilling options available  
on request.

Dimensions in millimetres.

PUMP SIZE			SHAFT NO.	PUMP DIMENSIONS				MOUNTING DIMENSIONS									BOLT HOLES		SHAFT END		GAP *	WEIGHT (KG)
INLET	OUTLET	IMP DIA		A	F	H1	H2	B	M1	M2	N1	N2	N3	T1	T2	W	S1	S2	D	L	X	
50	32	160	1	80	385	132	160	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	43
50	32	200	1	80	385	160	180	50	100	70	240	190	110	13	6	285	M12	M12	24	50	100	49
65	50	160	1	80	385	132	160	50	100	70	240	190	110	12	6	285	M12	M12	24	50	100	44
65	40	200	1	100	385	160	180	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	51
65	40	250	2	100	500	180	225	65	125	95	320	250	110	14	6	370	M12	M12	32	80	100	71
65	40	315	2	125	500	200	250	65	125	95	345	280	110	16	6	370	M12	M12	32	80	100	90
80	65	160	1	100	385	160	180	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	49
80	50	200	1	100	385	160	200	50	100	70	265	212	110	13	6	285	M12	M12	24	50	100	53
80	50	250	2	125	500	180	225	65	125	95	320	250	110	15	6	370	M12	M12	32	80	100	76
80	50	315	2	125	500	225	280	65	125	95	345	280	110	18	6	370	M12	M12	32	80	100	94
100	80	160	2	100	500	160	200	65	125	95	280	212	110	14	6	370	M12	M12	32	80	100	68
100	65	200	2	100	500	180	225	65	125	95	320	250	110	15	6	370	M12	M12	32	80	140	72
100	65	250	2	125	500	200	250	80	160	120	360	280	110	16	6	370	M16	M12	32	80	140	84
100	65	315	3	125	530	225	280	80	160	120	400	315	110	18	8	370	M16	M12	42	110	140	122
125	80	200	2	125	500	180	250	65	125	95	345	280	110	16	6	370	M12	M12	32	80	140	81
125	80	250	2	125	500	225	280	80	160	120	400	315	110	18	6	370	M16	M12	32	80	140	88
125	80	315	3	125	530	250	315	80	160	120	400	315	110	20	8	370	M16	M12	42	110	140	130
125	80	400	3	125	530	280	355	80	160	120	435	355	110	20	8	370	M16	M12	42	110	140	163
125	100	200	2	125	500	200	280	80	160	120	360	280	110	17	6	370	M16	M12	32	80	140	87
125	100	250	3	140	530	225	280	80	160	120	400	315	110	18	8	370	M16	M12	42	110	140	122
125	100	315	3	140	530	250	315	80	160	120	400	315	110	19	8	370	M16	M12	42	110	140	138
125	100	400	3	140	530	280	355	100	200	150	500	400	110	20	8	370	M20	M12	42	110	140	175
125	100	500	4	160	670	355	450	100	210	150	540	450	140	25	10	500	M20	M16	48	110	180	378
150	125	250	3	140	530	250	355	80	160	120	400	315	110	19	8	370	M16	M12	42	110	140	135
150	125	315	3	140	530	280	355	100	200	150	500	400	110	20	8	370	M20	M12	42	110	140	156
150	125	400	3	140	530	315	400	100	200	150	500	400	110	21	8	370	M20	M12	42	110	140	193
150	125	500	4	160	670	355	450	100	210	150	540	450	140	25	10	500	M20	M16	48	110	180	402
200	150	315	4	160	670	315	400	100	210	150	540	450	140	20	10	500	M20	M16	48	110	180	274
200	150	400	4	160	670	315	450	100	210	150	540	450	140	25	10	500	M20	M16	48	110	180	339
200	150	500	4	160	670	400	500	100	210	150	540	450	140	25	10	500	M20	M16	48	110	180	426
250	200	315	4	180	670	315	450	100	210	150	540	450	140	25	10	500	M20	M16	48	110	180	314

\* Gap necessary for the withdrawal or bearing housing, backplate and impeller assembly towards the drive end.

**PENTAIR****CENTRIFUGAL PUMP PERFORMANCE DATA****ISO5199**END SUCTION PUMPS  
50Hz PERFORMANCE**MATERIAL  
SPECIFICATIONS**

SYMBOL	MATERIAL	SPECIFICATIONS	COMPONENT WHERE USED
CI	Cast Iron	AS1830/T260 Equivalent Standards: BS 1452 (1977) Grade 260 ANSI. 625.1 Class 40 ASTM A48 Class 40	Bearing Housing Bearing Cover Volute Casing Backplate Impeller
ZF		AS 1565/ C90250 Equivalent Standards: BS 1400 PB3, ISO 1338 CU SN 10	Volute Casing Backplate Impeller Wear rings
SS	Cast Stainless Steel	AS2074/H6B Equivalent Standards BS 3100 (1976) Grade 316C16 ASTM A296 Grade CF8M	Volute Casing Backplate Impeller Wear rings
	Wrought Stainless Steel	BS 970 Grade 431 S29 Equivalent Standards: ASTM A276-986 431 JIS G4303 SUS 431	Shaft
		BS 970 Grade 316 S31 Equivalent Standards: ASTM A276-986 316 JIS G4303 SUS 316	Shaft Impeller Washer Impeller Nut Casing & Discharge Flange Plugs
	316 Stainless Steel	AS 2548 Gr. A4-80	Bolts & Setscrews (ZF & SS Only)
	2205 Duplex Stainless Steel	UNS S31803 ASTM A276-98b	Shaft Impeller key
MS	Mild Steel	AS 1204/250	Support Foot
HT	High Tensile Steel	AS 1110 Gr. 8.8	All Bolts and Setscrews
	Mild Steel Zinc Plated		Casing and Discharge Flange Plugs
	Key Steel		Pulley key

**PAINTING**

One Coat - Wattyl Super Etch Grey Primer (Wattyl Part No. 123907)

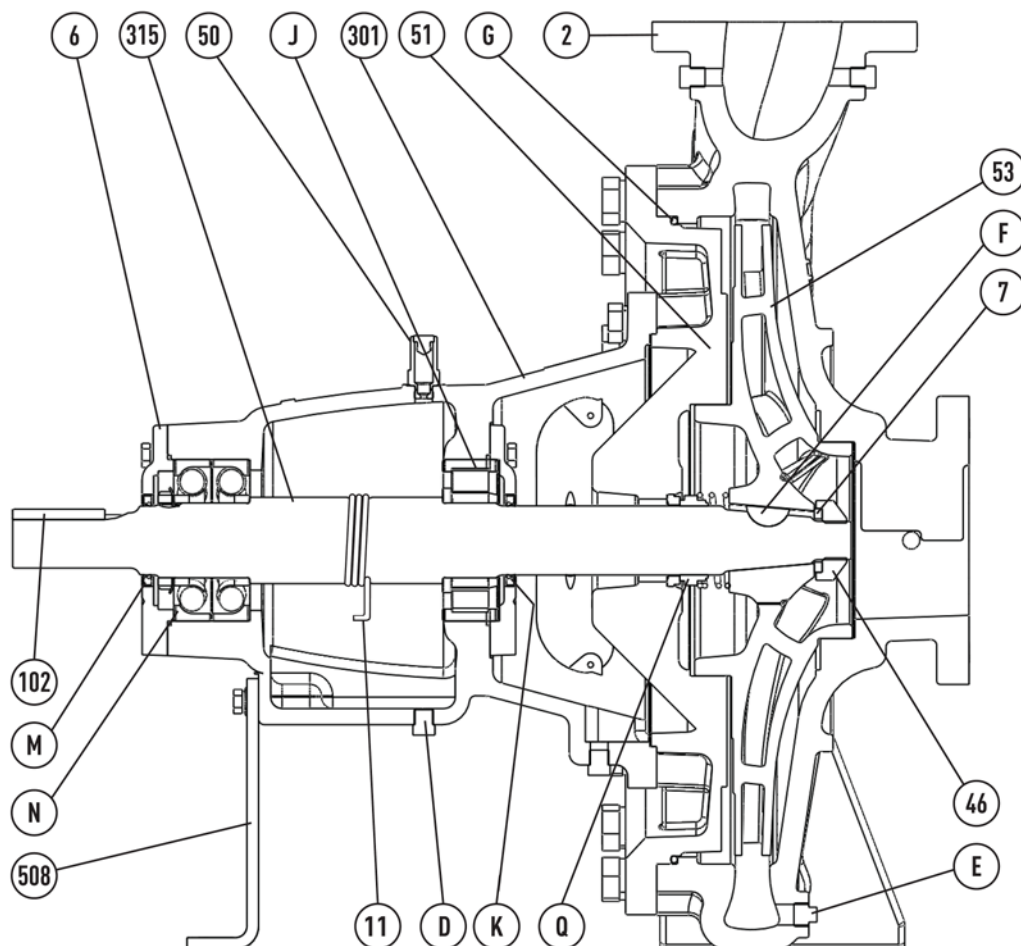
Two Coats - Wattyl Hammer Finish Green (Wattyl Part no. 151741)

Colour - Hammer Finish Green



### ISO PRO Pump Sectional Arrangement Details

ITEM NO.	DESCRIPTION
2	Pump Body
6	Bearing Cover
7	Impeller Washer
11	Oil Thrower
46	Impeller Nut
50	Oil Breather
51	Backplate
53	Impeller
102	Shaft Key
301	Bearing Housing
315	Shaft
508	Support Foot
D	Oil Drain Plug
E	Casing Plug
F	Impeller Key
G	O-Ring
J	Bearing - Impeller End
K	Dust Seal - Impeller End
M	Dust Seal - Pulley End
N	Bearing - Pulley End
Q	Mechanical Seal







# PENTAIR

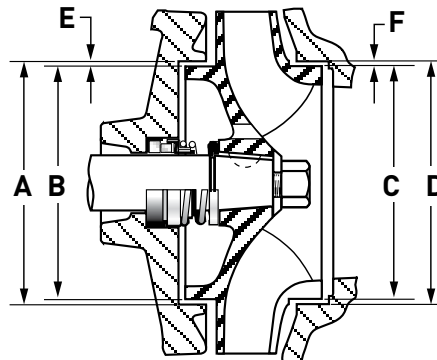
CENTRIFUGAL PUMP PERFORMANCE DATA

# ISO5199

END SUCTION PUMPS

50Hz PERFORMANCE

# IMPELLER CLEARANCES



PUMP SIZE	IMPELLER AND CASING SEALING DIAMETERS						RADIAL CLEARANCE			
	A	B		C		D	E		F	
		CI/ZF	SS	CI/ZF	SS		CI/ZF	SS	CI/ZF	SS
50 x 32-160 65 x 50-160	92.05	91.76	91.63	91.76	91.63	92.05	0.12	0.18	0.12	0.18
	92.00	91.71	91.58	91.71	91.58	92.00	0.17	0.23	0.17	0.23
80 x 65-160	92.05	91.76	91.63	104.72	104.57	105.05	0.12	0.18	0.14	0.21
	92.00	91.71	91.58	104.67	104.52	105.00	0.17	0.23	0.19	0.26
100x 80-160	132.05	131.68	131.51	131.68	131.51	132.05	0.16	0.24	0.16	0.24
	132.00	131.61	131.44	131.61	131.44	132.00	0.22	0.30	0.22	0.30
50 x 32-200 65 x 40-200	105.05	104.72	104.57	91.76	91.63	92.05	0.14	0.21	0.12	0.18
	105.00	104.67	104.52	91.71	91.58	92.00	0.19	0.26	0.17	0.23
80 x 50-200	105.05	104.72	104.57	104.72	104.57	105.05	0.14	0.21	0.14	0.21
	105.00	104.67	104.52	104.67	104.52	105.00	0.19	0.26	0.19	0.26
100 x 65-200	132.05	131.68	131.51	131.68	131.51	132.05	0.16	0.24	0.16	0.24
	132.00	131.61	131.44	131.61	131.44	132.00	0.22	0.30	0.22	0.30
125 x 80-200 125 x 100-200	160.05	159.66	159.49	159.66	159.49	160.05	0.17	0.25	0.17	0.25
	160.00	159.59	159.42	159.59	159.42	160.00	0.23	0.31	0.23	0.31
65 x 40-250 80 x 50-250	115.05	114.70	114.55	114.70	114.55	115.05	0.15	0.22	0.15	0.22
	115.00	114.65	114.50	114.65	114.50	115.00	0.20	0.27	0.20	0.27
100 x 65-250	132.05	131.68	131.51	131.68	131.51	132.05	0.16	0.24	0.16	0.24
	132.00	131.61	131.44	131.61	131.44	132.00	0.22	0.30	0.22	0.30
125 x 80-250	132.05	131.68	131.51	159.66	159.49	160.05	0.16	0.24	0.17	0.25
	132.00	131.61	131.44	159.59	159.42	160.00	0.22	0.30	0.23	0.31
65 x 40-315	115.05	114.70	114.55	104.72	104.57	105.05	0.15	0.22	0.14	0.21
	115.00	114.65	114.50	104.67	104.52	105.00	0.20	0.27	0.19	0.26
80 x 50-315	115.05	114.70	114.55	114.70	114.55	115.05	0.15	0.22	0.15	0.22
	115.00	114.65	114.50	114.65	114.50	115.00	0.20	0.27	0.20	0.27
125 x 100-250 150 x 125-250 150 x 125-315 125 x 80-400 125 x 100-400 150 x 125-400	186.05	185.66	185.48	185.66	185.48	186.05	0.17	0.26	0.17	0.26
	186.00	185.59	185.41	185.59	185.41	186.00	0.23	0.32	0.23	0.32
100 x 65-315 125 x 80-315 125 x 100-315	160.05	159.66	159.49	159.66	159.49	160.05	0.17	0.25	0.17	0.25
	160.00	159.59	159.42	159.59	159.42	160.00	0.23	0.31	0.23	0.31
200 x 150-315	265.66	265.11	264.97	235.09	234.93	235.59	0.24	0.31	0.22	0.30
	265.60	265.05	264.91	235.03	234.87	235.53	0.30	0.37	0.28	0.36
250 x 200-315	265.66	265.11	264.97	265.11	264.97	265.66	0.24	0.31	0.24	0.31
	265.60	265.05	264.91	265.05	264.91	265.60	0.30	0.37	0.30	0.37
125 x 100-500	235.59	235.09	234.93	170.09	169.90	170.51	0.22	0.30	0.18	0.27
	235.53	235.03	234.87	170.03	169.84	170.45	0.28	0.36	0.24	0.33
150 x 125-500 200x150-500	235.59	235.09	234.93	200.10	199.90	200.55	0.22	0.30	0.19	0.29
	235.53	235.03	234.87	200.04	199.84	200.49	0.28	0.36	0.25	0.35
200x150-400	235.59	235.09	234.93	235.09	234.93	235.59	0.22	0.30	0.22	0.30
	235.53	235.03	234.87	235.03	234.87	235.53	0.28	0.36	0.28	0.36



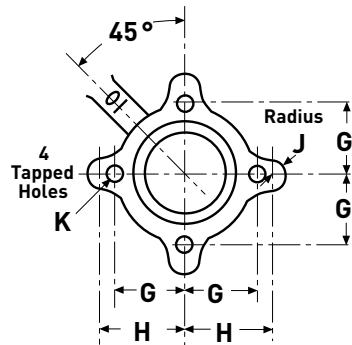
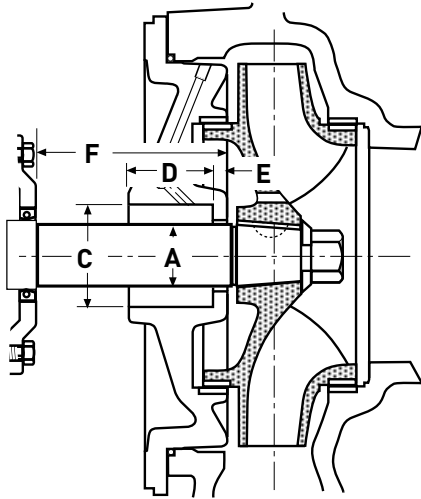
CENTRIFUGAL PUMP TECHNICAL DATA

**ISO5199**  
END SUCTION PUMPS  
TECHNICAL DATA

**WEAR RING  
TOLERANCES**

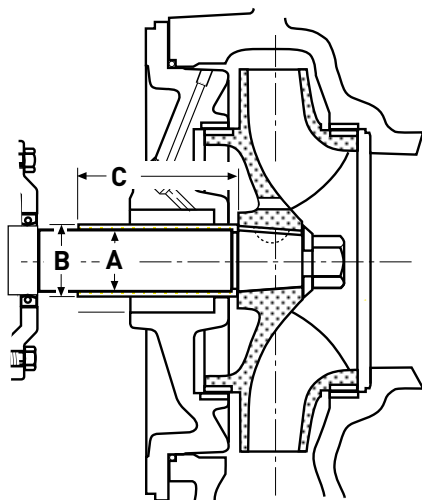
## Machining Sizes to Retrofit Wear Rings to Casings and Impellers

NOMINAL SIZE	IMPELLER WEAR RING	IMPELLER TURN SIZE (mm)	CASING WEAR RING	CASING BORE SIZE (mm)
92mm	SEA026	Ø 84.830 / 84.795	SEA027	Ø 99.000 / 99.035
105mm	SEC026	Ø 97.830 / 97.795	SEC027	Ø 112.000 / 112.035
115mm	SGB026	Ø 106.800 / 106.765	SGB027	Ø 123.000 / 123.035
132mm	SED026	Ø 123.77 / 123.73	SED027	Ø 140.000 / 140.040
160mm	SFF026	Ø 151.770 / 151.730	SFF027	Ø 168.000 / 168.040
170mm	SKF026	Ø 158.08 / 158.03	SKF027	Ø 182.46 / 182.51
185mm	SGF026	Ø 177.770 / 177.730	SGF027	Ø 194.000 / 194.040
200mm	SKG026	Ø 188.10 / 188.05	SKG027	Ø 210.50 / 210.55
235mm	SHH026	Ø 223.09 / 223.04	SHH027	Ø 247.55 / 247.60
265mm	SHJ026	Ø 253.10 / 253.05	SHJ027	Ø 277.62 / 277.67



### Seal Cavity Dimension Data

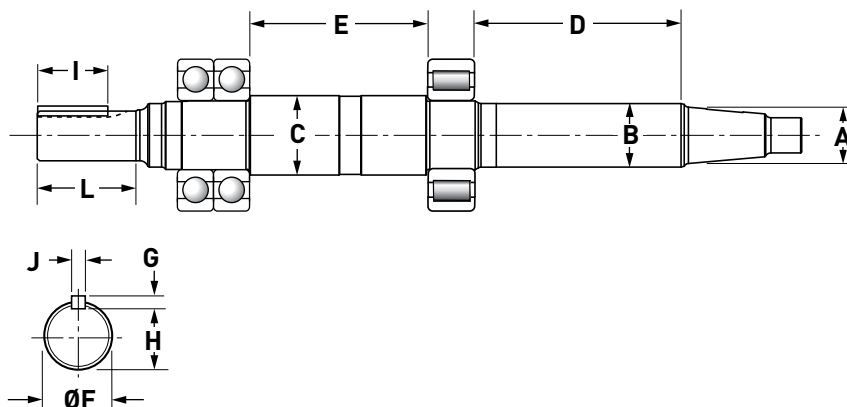
SHAFT MODULE	A	C	D	E	F	G	J	K
No. 1 Shaft	32.97	56.1	56	7	109	45	12	M12 x 1.75
	33	56.25						
No. 2 Shaft	42.97	66.1	56	8	116	51	12	M12 x 1.75
	43	66.25						
No. 3 Shaft	52.97	80.1	68.5	9	135	60	12	M12 x 1.75
	53	80.25						
No. 4 Shaft	59.96	92.05	100	10	167	62.5	12	M12 x 1.75
	60	92.15						



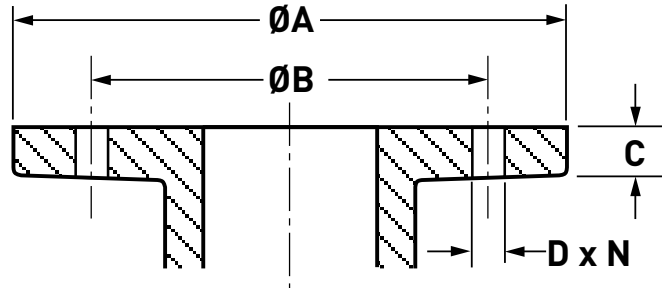
### Shaft Sleeve Dimension Data

SHAFT MODULE	A	B	C
No. 1 Shaft	33	40	96
No. 2 Shaft	43	50	96
No. 3 Shaft	53	60	110
No. 4 Shaft	60	68	140

## ISO PRO PUMPS (ISO5199 STANDARD)



SHAFT MODULE	SHAFT DIMENSIONS (mm)												BEARING SIZES		
	A	B	C	D	E	F (Dia.)		G	H (Depth)		I	J	L	IMP. END	DRIVE END
						NOM.	TOL.		NOM.	TOL.					
No 1 SHAFT	25.27	33	45	128	105.5	24	+0.01 -0.01	7	20	+0.0 -0.2	28	8	48	NJ307ECP	7307BECBP (x2)
No 2 SHAFT	34.8	43	54	138	154	32	+0.02 -0.0	8	27	+0.0 -0.2	55	10	80	NJ2309ECP	7309BECBP (x2)
No 3 SHAFT	45	53	66	156	112	42	+0.02 -0.01	8	37	+0.0 -0.2	80	12	110	NJ2311ECP	7311BECBP (x2)
No 3 SHAFT	53	53	66	156	112	42	+0.02 -0.01	8	37	+0.0 -0.2	80	12	110	NJ2311ECP	7311BECBP (x2)
No 4 SHAFT	53	60	75	202.2	168	48	+0.02 -0.01	9	42.5	+0.1 -0.25	80	14	110	NJ2313ECP	7313BECBP (x2)



NOMINAL FLANGE SIZE		32	40	50	65	80	100*	125*	150*	200*	250*
FLANGE DIAMETER	A	140	150	165	185	200	220	250	285	340	405
HOLE P.C.D.	B	87	98	114	127	146	178	210	235	292	356
FLANGE THICKNESS	C	18	18	20	20	22	24	26	26	30	32
HOLE DIAMETER	D	14	14	18	18	18	18	18	22	22	22
NUMBER OF HOLES	N	4	4	4	4	4	8	8	8	8	12

**NOTE:**

1. Holes machined off centrelines.
2. Flange drilling as shown below conforms to AS2129 - 1982 Table 'E' for cast iron flanges.
3. Flange drilling to ANSI B16.1.1975 Class 125 (ISO7005 - PN20) PN16 are available options.

\* Discharge flanges on No. 4 shaft pumps are tapped as follows:

125x100-500 and 150x125-500 tapped M16 x 2mm

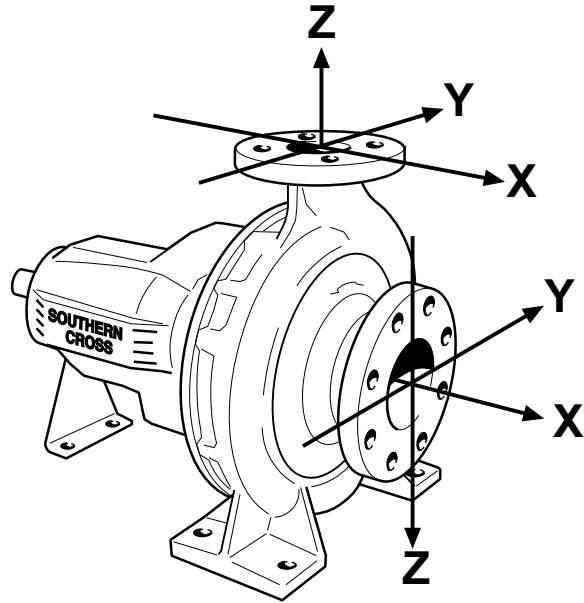
200x150-315, 200x150-400, 200x150-500 and 250x200-315 tapped M20 x 2.5mm



PUMP SIZE	CI IMPELLER (kg)	IMPELLER ROTATIONAL INERTIA (kg.m <sup>2</sup> )	MIN. CASING THICKNESS (mm)	CI / ZF IMPELLER		SHAFT CRITICAL SPEED (r.p.m.)	MAX OPERATING SPEED (r.p.m.)	IMPELLER	
				HYDROSTATIC TEST PRESSURE (kPa)	MAX. WORKING PRESSURE (kPa)			No. of VANES	MAX SPHERE SIZE (mm)
50 x 32 - 160	2.7	0.008	9	3800	2500	14,600	3600	6	5
65 x 50 - 160	2.6	0.008	9	3800	2500	14,600	3600	6	7
80 x 65 - 160	2.8	0.01	10	3800	2500	14,600	3600	6	11
100 x 80 - 160	4.2	0.014	10	3800	2500	16,700	3600	6	12
50 x 32 - 200	3.7	0.018	9	3300	2200	12,400	3600	6	4
65 x 40 - 200	4	0.019	9	3800	2500	12,400	3600	6	5
80 x 50 - 200	4	0.021	10	3800	2500	12,400	3600	6	9
100 x 65 - 200	6	0.033	10	2800	1850	14,900	3600	6	14
125 x 80 - 200	6.5	0.037	11.5	2620	1750	13,900	3000	6	15
125 x 100 - 200	6.4	0.036	13	3000	2000	14,400	3000	6	17
65 x 40 - 250	6	0.042	10	3300	2200	14,900	3600	5	5
80 x 50 - 250	6	0.042	10	2800	1900	14,900	3600	6	6
100 x 65 - 250	7	0.052	11	2600	1700	13,600	3000	6	9
125 x 80 - 250	8	0.061	12.5	2620	1750	12,600	3000	6	15
125 x 100 - 250	9.5	0.077	12	2400	1600	14,450	3000	6	23
150 x 125 - 250	10	0.088	14	2470	1650	13,970	2600	6	33
65 x 40 - 315	10.1	0.128	11	2800	1900	12,600	3000	5	5
80 x 50 - 315	9.2	0.112	12	3300	2200	11,800	3000	5	7
100 x 65 - 315	12.3	0.139	13	2700	1800	12,820	3000	6	9.5
125 x 80 - 315	13	0.152	14	2620	1750	12,300	3000	6	11.5
125 x 100 - 315	13.2	0.157	16	3070	2050	12,250	3000	6	14.5
150 x 125 - 315	13.4	0.164	16	2470	1650	12,160	2500	6	26
200 x 150 - 315	20	0.285	17	2400	1600	8660	2100	6	23
250 x 200 - 315	24	0.36	18	2400	1600	7480	1800	6	29
125 x 80 - 400	20.5	0.422	15	2400	1600	9990	2300	5	9.5
125 x 100 - 400	19.9	0.389	16	2400	1600	10,140	2300	6	12
150 x 125 - 400	20.6	0.427	17	2400	1600	9970	2300	6	18
200 x 150 - 400	30	0.704	20	2400	1600	7380	1900	6	31
125 x 100 - 500	39	1.233	20	2400	1600	6710	1800	9	21
150 x 125 - 500	41	1.392	21	2400	1600	6510	1800	7	20
200 x 150 - 500	42	1.546	22	2400	1600	6360	1800	6	21.5

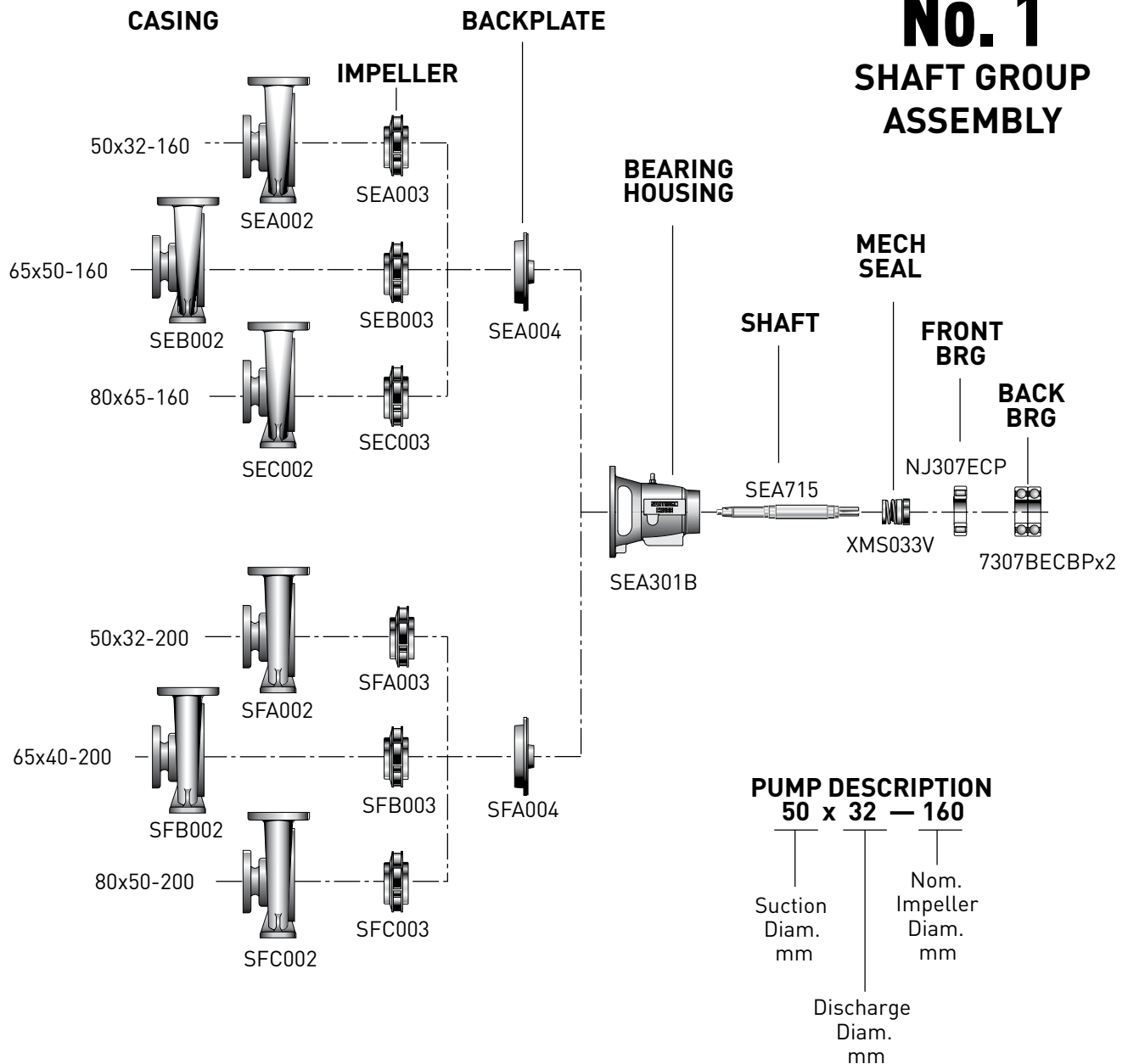
**Fx Fy Fz Newtons**

**Mx My Mz Newton Metres**



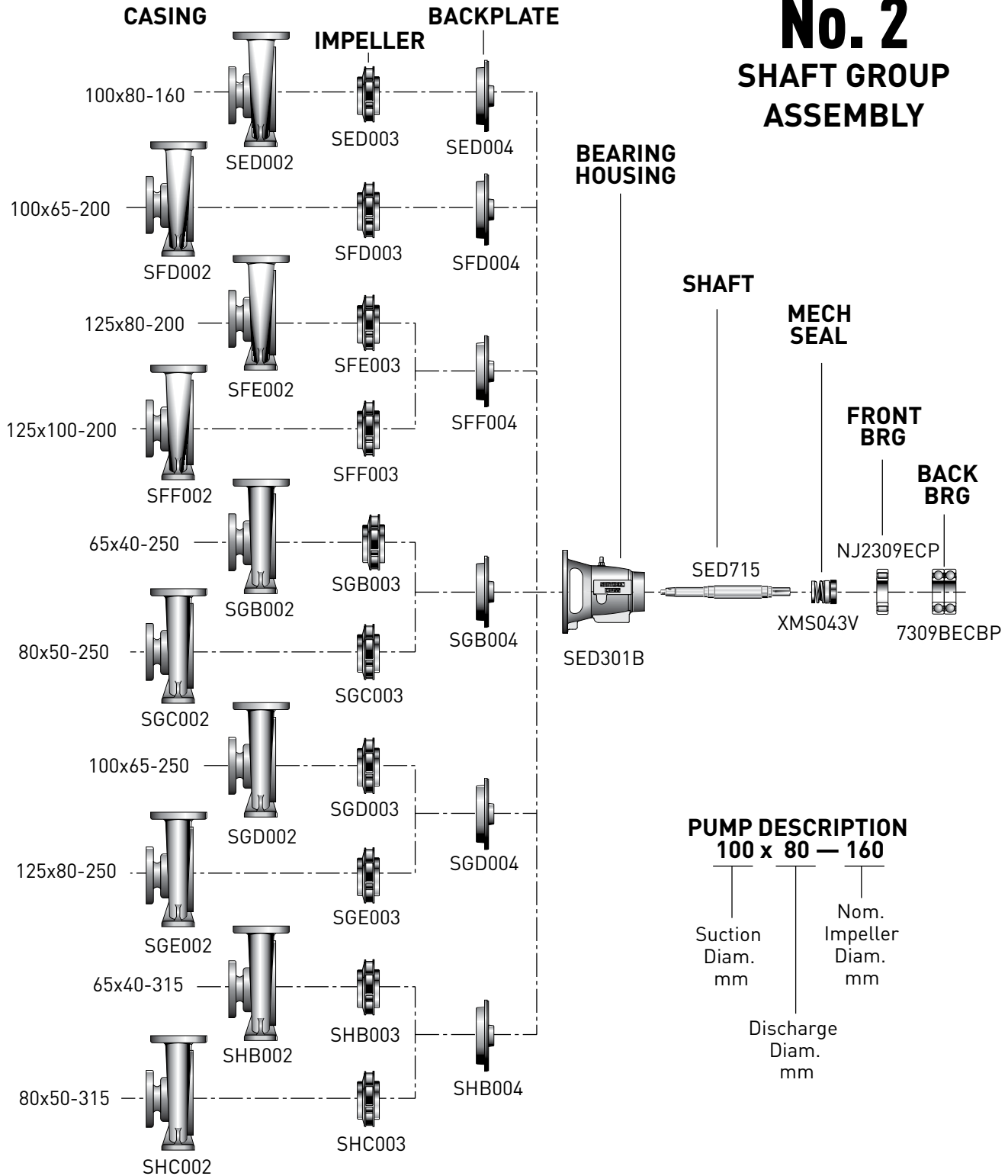
FLANGE SIZE	SUCTION			DISCHARGE			MOMENTS		
	Fx	Fy	Fz	Fx	Fy	Fz	Mx	My	Mz
50mm	445	356	289	356	289	445	230	115	176
65mm	556	445	367	445	367	556	352	176	268
80mm	667	534	445	534	445	667	474	237	359
100mm	890	712	578	712	578	890	664	338	502
125mm	1223	978	800	978	800	1223	908	464	691
150mm	1557	1245	1023	1245	1023	1557	1152	590	881
200mm	2446	1890	1556	1890	1556	2446	1762	881	1288
250mm	3336	2668	2224	2668	2224	3336	2508	1220	1898

## ISO PRO PUMPS

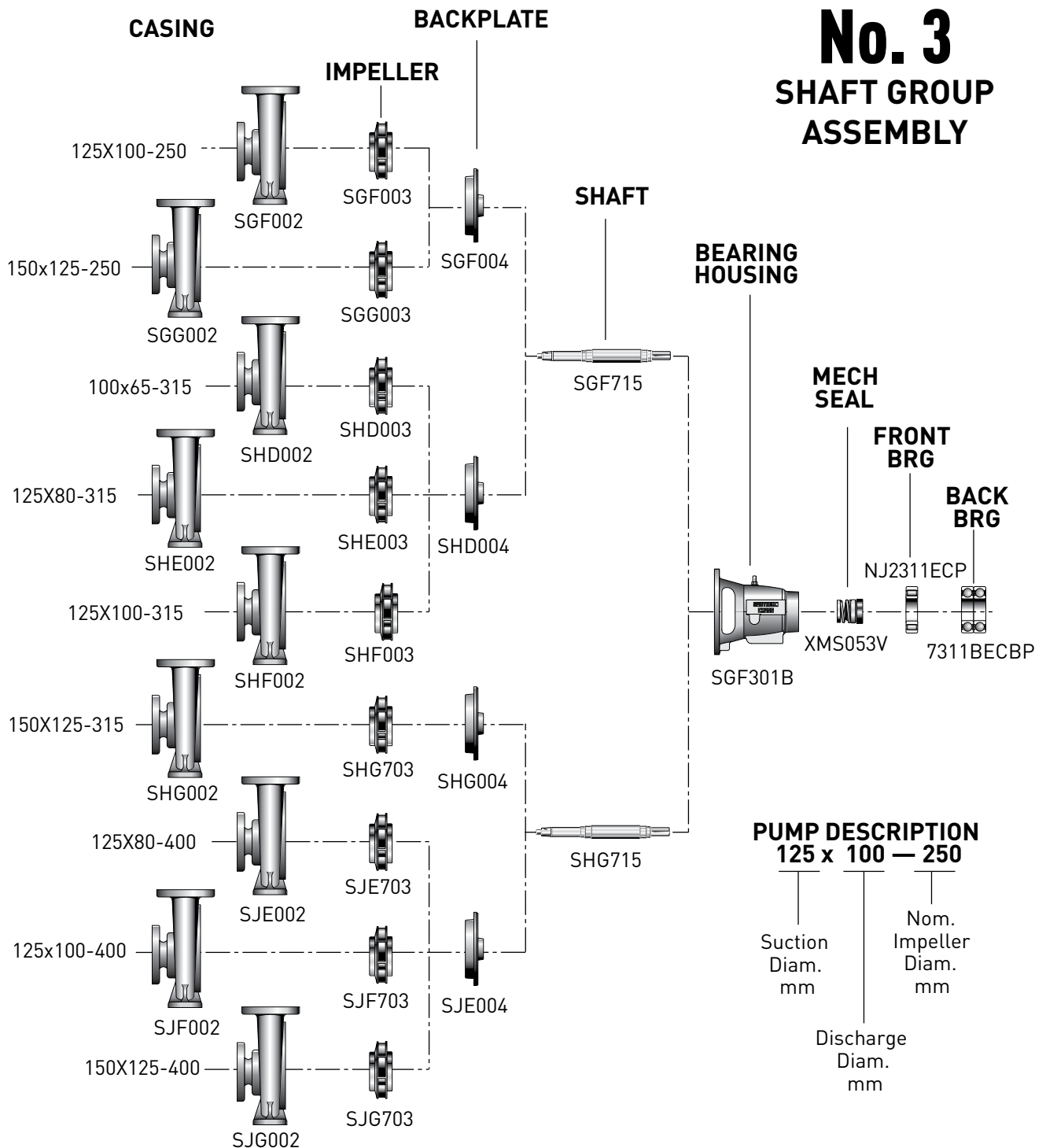


### ISO PRO PUMPS

## No. 2 SHAFT GROUP ASSEMBLY



## ISO PRO PUMPS



### ISO PRO PUMPS

## No. 4 SHAFT GROUP ASSEMBLY

