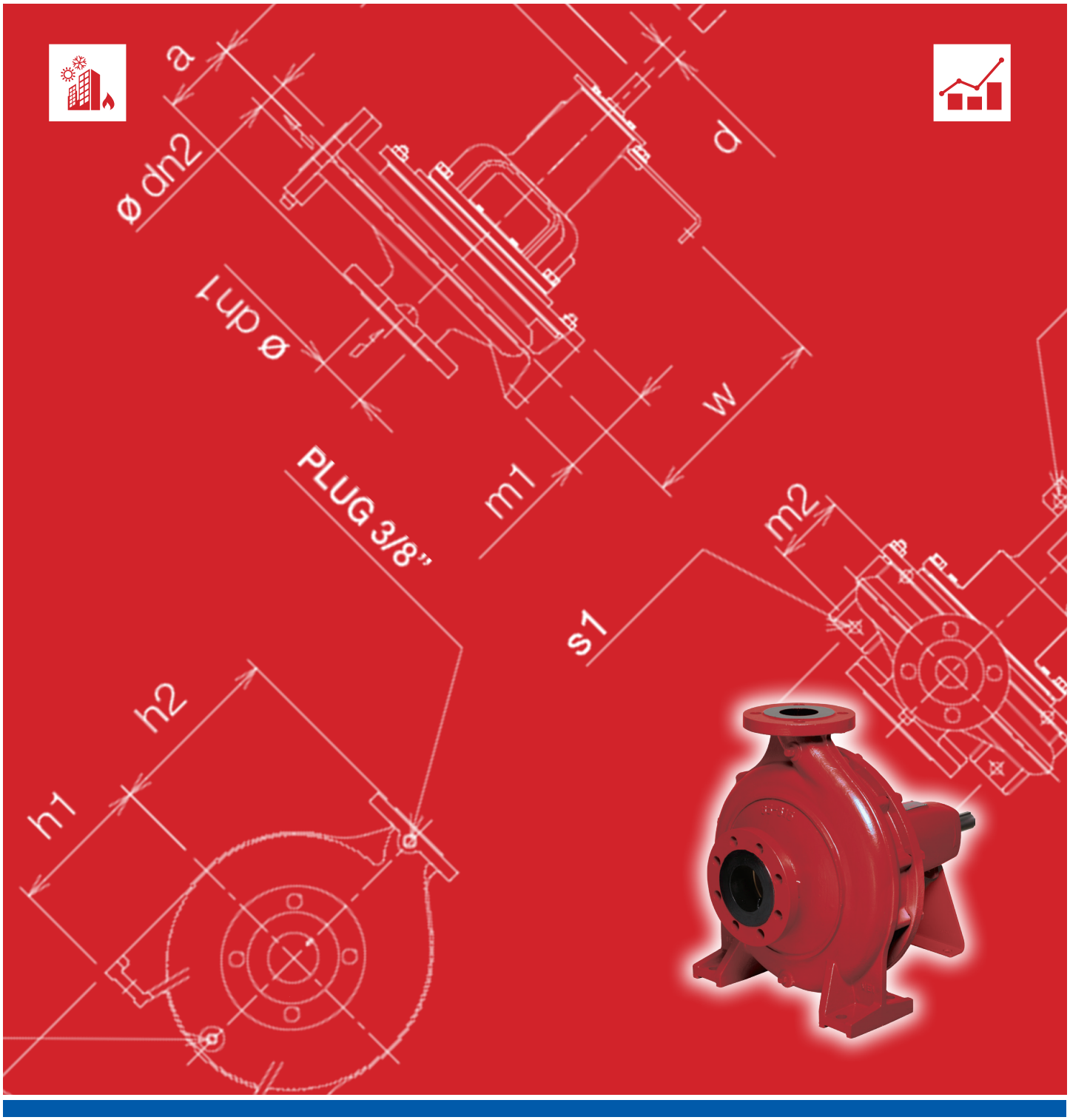
Looking ahead,
going beyond expectations

Ahead Beyond

EBARA

GS FIRE-FIGHTING (EN 12259-12)

Data Book 50Hz





Japanese Technology since 1912

www.ebaraeurope.com

INDEX

PRODUCT FEATURED

Description 4
Performance Data 4
Pump constrution Features 4
Painting 4
Type key 5
Nameplate 6

SELECTION CHART

Performance Table Models 32-40-50 7
Performance Table Models 65-80-100 8

PERFORMANCE CURVES

Performance curves specifications 9
Performance curve 10

CONSTRUCTION

Sectional View 26
Materials of Constructions 27

TECHNICAL DATA

Nominal Dimensions of Parts 28
Interchangeability Chart 28
Selection of shaft seal 29

DIMENSIONS

Models 32-40-50-65-80 30
Models 100 31
Packing 32

EBARA Pumps Europe reserves the right to make modifications without prior notice

PRODUCT FEATURES

DESCRIPTION

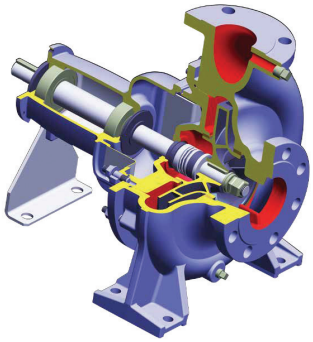
- GS FF End-suction pumps of the back pull-out type, standardised to EN 733, suitable for EN 12845 fire fighting system
- Construction according to EN 12259-12
- GS FF bare shaft pumps can be coupled to both diesel engines and electric motors.
- TOLERANCES: Pump UNI EN ISO 9906:2012 grade 2B

PERFORMANCE DATA

- Rated flow Qr up to 268 m3/h.
  Max Head: 151 m

PUMP CONSTRUCTION FEATURES

- Casing and casing cover: cast iron EN-GJL-250 (EN-JL1040)
- Impeller: closed centrifugal, single suction type and balancing holes to reduce axial thrust, bronze CuSn5Zn5Pb5 (CC491K)
- Wear rings: Bronze. CuSn5Zn5Pb5 (CC491K)
- Shaft: stainless steel X17CrNi16-2 (1.4057, AISI 431)
- Normalized flanges: UNI EN 1092-2, from DN 32 up to DN 100, PN 16



PAINTING

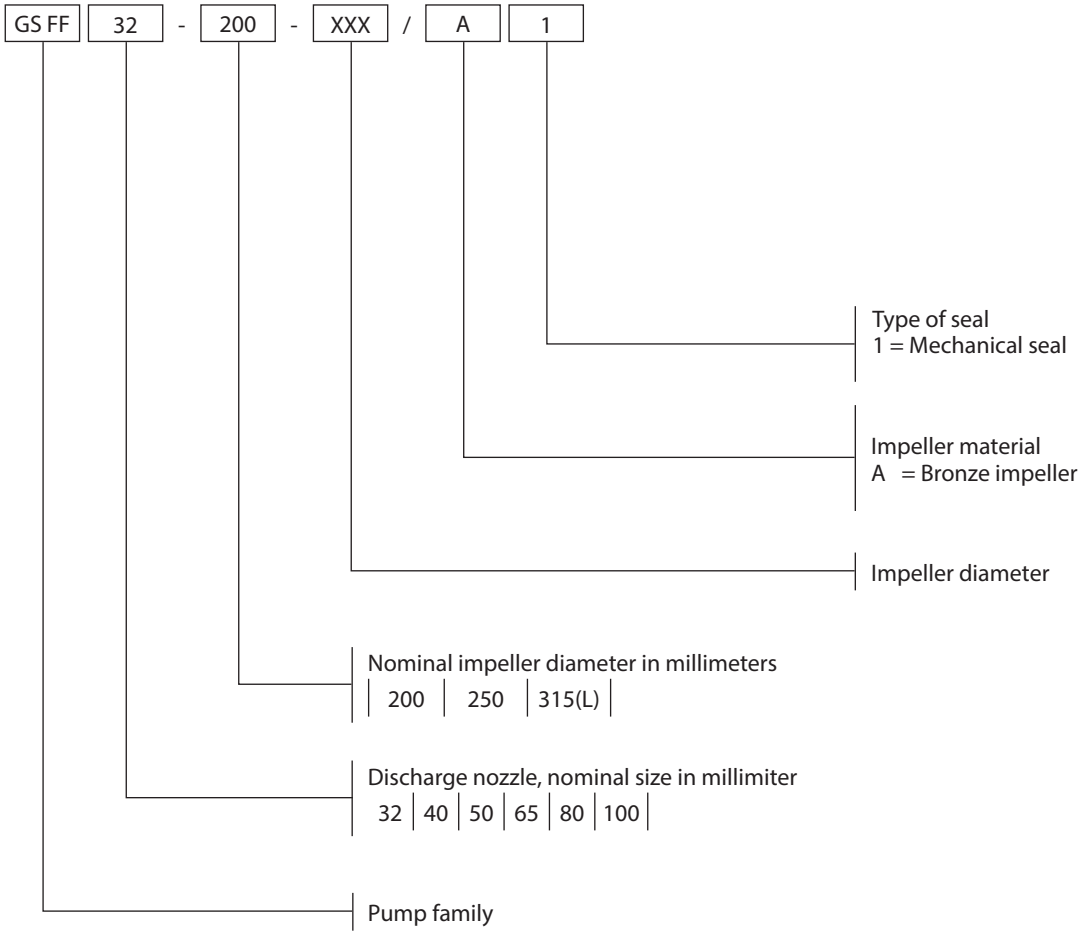
- Water base epoxy paint primer (Cataphoresis painting) highly resistant to corrosion
- Two-component water-based topcoat with acrylic resins. Standard color RAL 3000 red painting.

PUMP	
Capacities	To 268 m^3/h
Heads	To 151 m
Liquid temperatures	-10°C to 120°C
Max. working pressures	Up to 16Bar (1.6 MPa)
Materials	Casing: cast iron
	Impeller: bronze
Seal	Mechanical Seal: SiC/C/EPDM
Standards	EN 12259-12
Rotation	Clockwise viewed from coupling end

EBARA Pumps Europe reserves the right to make modifications without prior notice

GS FF FIRE-FIGHTING PUMP

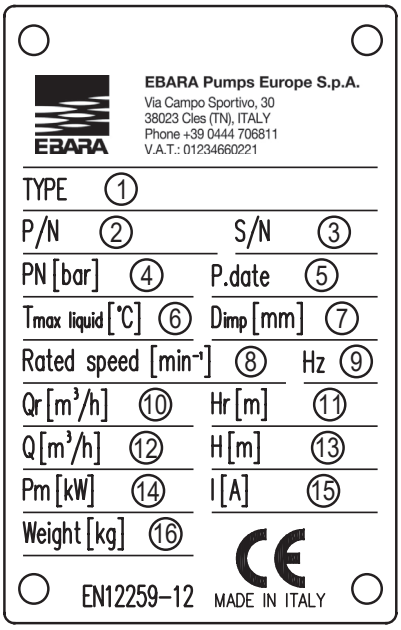
TYPE KEY



e.g. FIRE-FIGHTING PUMP
GS FF 65-200-162/A1

EBARA Pumps Europe reserves the right to make modifications without prior notice

NAMEPLATE



1 - Product name
2 - Product code
3 - Serial number
4 - Nominal Pressure
5 - Production date
6 - Max temperature liquid
7 - Impeller diameter
8 - Rated speed
9 - Frequency
10 - Flow rate
11 - Head rate
12 - Min-Max Flow (max Flow at NPSHr 16m)
13 - Min-Max Head (min Head at NPSHr 16m)
14 - Maximum power consumption (at NPSHr 16m)
15 - Current
16 - Weight

EBARA Pumps Europe reserves the right to make modifications without prior notice

PERFORMANCE TABLE GS FF
MODELS 32-40-50

Model	Diameter	Max power consumption [kW]	Q = Flow rate												
			m^3/h 0	9	12	18	24	30	36	45	60	72	90	120	165
			l/min 0	150	200	300	400	500	600	750	1000	1200	1500	2000	2750
			H = Head [m]												
GS FF 32-200-175/A1	175	5,4	40,1	40,1	39,9	38,7	36,7	33,9	30,2	22,9	-	-	-	-	-
GS FF 32-200-184/A1	184	7	44,3	44,3	44,2	43,3	41,5	39,1	35,9	29,5	-	-	-	-	-
GS FF 32-200-197/A1	197	8,3	51,2	51,3	51,2	50,4	48,9	46,8	44	38,2	-	-	-	-	-
GS FF 32-200-208/A1	208	10	57,7	57,7	57,7	56,9	55,5	53,4	50,7	45,2	31,7	-	-	-	-
GS FF 32-200-219/A1	219	11,7	63,7	63,8	63,6	63	61,8	60,1	57,6	52,5	39,4	-	-	-	-
GS FF 32-250-198/A1	198	7,2	53,1	-	51,7	50	47	42,4	35,7	-	-	-	-	-	-
GS FF 32-250-222/A1	222	11,1	67,1	-	66,1	64,5	61,9	57,9	52,3	40,3	-	-	-	-	-
GS FF 32-250-241/A1	241	13,8	79,6	-	78,6	77,4	75,3	72	67,1	55,9	-	-	-	-	-
GS FF 32-250-262/A1	262	17,7	94,4	-	93,5	92,5	90,8	88	83,9	74,7	48,2	-	-	-	-
GS FF 40-200-172/A1	172	10,7	40,9	-	-	40,8	40,3	39,4	38,3	36	30,6	24,8	13,2	-	-
GS FF 40-200-189/A1	189	13,6	49,6	-	-	49,9	49,4	48,6	47,6	45,5	40,6	35,2	24,7	-	-
GS FF 40-200-205/A1	205	17,5	58,7	-	-	59,1	58,6	57,8	56,7	54,5	49,5	44,2	34,3	-	-
GS FF 40-200-219/A1	219	18,5	66,4	-	-	66,5	66	65,2	64,1	61,8	56,7	51,2	40,9	-	-
GS FF 40-250-211/A1	211	13,6	61,4	-	-	60	58,8	57,2	55,2	51,4	42,5	33,2	-	-	-
GS FF 40-250-228/A1	228	18,4	72,3	-	-	71	70	68,6	66,8	63,4	55,6	47,1	30,5	-	-
GS FF 40-250-240/A1	240	21,6	80,5	-	-	79,1	78,3	77,1	75,7	72,7	65,4	57	39,2	-	-
GS FF 40-250-260/A1	260	27,9	94,5	-	-	92,8	92	91,1	90	87,8	82,1	75	58,6	-	-
GS FF 40-315-268/A1	268	22,3	94,4	-	-	92,3	91,5	90,3	88,3	83,1	66	-	-	-	-
GS FF 40-315-289/A1	289	33,4	117,2	-	-	115,8	115,5	114,8	113,7	110,5	99,5	83,5	-	-	-
GS FF 40-315-310/A1	310	42,5	135,5	-	-	133,9	133,8	133,6	133,0	131,1	123,1	110,5	-	-	-
GS FF 40-315-326/A1	326	50,9	151,4	-	-	150,0	149,9	149,7	149,3	147,7	141,5	131,6	105,6	-	-
GS FF 50-200-171/A1	171	14,1	40,8	-	-	-	40,8	40,5	40,2	39,5	37,5	35,1	29,8	15,3	-
GS FF 50-200-188/A1	188	17,3	49,6	-	-	-	50,0	49,3	49,0	48,2	46,3	44,0	38,9	24,9	-
GS FF 50-200-203/A1	203	21,8	58,2	-	-	-	58,5	58,1	57,8	57,1	55,2	53,0	48,4	36,2	-
GS FF 50-200-219/A1	219	24,5	67,1	-	-	-	67,4	67,2	67,1	66,2	63,9	61,4	56,5	45,5	-
GS FF 50-250-210/A1	210	22,5	65	-	-	-	64,8	64,7	64,5	64,2	62,8	61,2	57,6	48,0	-
GS FF 50-250-238/A1	238	36,1	83,4	-	-	-	83,4	83,4	83,2	82,8	81,7	80,4	77,2	68,5	-
GS FF 50-250-254/A1	254	42,9	94,5	-	-	-	93,9	93,8	93,6	93,4	92,6	91,4	88,4	78,5	-
GS FF 50-250-270/A1	270	46,1	105,3	-	-	-	105,2	105,1	104,8	104,5	102,9	101,0	97,2	87,9	66,2
GS FF 50-315-277/A1	277	42,6	106,7	-	-	-	104,3	103,5	102,5	100,9	97,2	93,3	85,4	65,1	-
GS FF 50-315-290/A1	290	49,4	116,7	-	-	-	113,1	112,3	111,5	110,1	107,0	104,4	98,3	80,7	-
GS FF 50-315-324/A1	324	72,1	155,3	-	-	-	153,4	152,7	151,9	150,4	147,0	143,4	136,1	118,2	73,6

Note: highlighted values not selectable for EN 12259-12

EBARA Pumps Europe reserves the right to make modifications without prior notice

PERFORMANCE TABLE GS FF
MODELS 65-80-100

Model	Diameter	Max power consumption [kW]	Q = Flow rate												
			m^3/h 0	36	60	90	120	150	180	210	252	285	330	375	435
			l/min 0	600	1000	1500	2000	2500	3000	3500	4200	4750	5500	6250	7250
			H = Head [m]												
GS FF 65-200-162/A1	162	14,9	34,3	34,4	34,1	32,6	29,5	24,3	16,4	-	-	-	-	-	-
GS FF 65-200-183/A1	183	25,8	44,3	44,3	44,3	43,5	41,3	36,9	29,5	18,5	-	-	-	-	-
GS FF 65-200-203/A1	203	33	55,1	55,4	55,5	55,4	53,5	49,5	42,9	32,5	-	-	-	-	-
GS FF 65-200-219/A1	219	35,5	63,6	63,6	63,6	62,5	60,3	56,6	51,4	44,3	-	-	-	-	-
GS FF 65-250-215/A1	215	32,1	61,7	61,3	60,9	59,5	56,7	52,1	44,9	34,7	-	-	-	-	-
GS FF 65-250-237/A1	237	41,7	74,9	74,8	74,8	74,1	70,9	65,5	57,5	46,2	-	-	-	-	-
GS FF 65-250-254/A1	254	50	86,6	86,4	85,9	85,4	82,4	77	68,9	57,6	-	-	-	-	-
GS FF 65-250-273/A1	273	56,4	100,4	100,3	100,2	98,4	94,3	88,4	80,6	71,0	54,8	-	-	-	-
GS FF 65-315-258/A1	258	62,9	95,5	95,1	94,8	93,3	90,1	85,2	78,4	69,4	-	-	-	-	-
GS FF 65-315-280/A1	280	80,5	112,4	112,0	111,8	111,0	108,7	105,1	99,9	92,9	79,4	-	-	-	-
GS FF 65-315-298/A1	298	85,7	126,0	126,0	125,7	124,1	121,2	116,8	110,9	103,2	-	-	-	-	-
GS FF 65-315-320/A1	320	97,6	146,1	145,3	145,1	143,7	141,8	138,3	132,4	123,6	105,0	-	-	-	-
GS FF 80-200-200/A1	200	42,5	53,4	-	52,8	52,1	51,0	49,4	47,1	44,0	38,1	31,9	21,0	-	-
GS FF 80-200-205/A1	205	53,5	55,7	-	55,9	55,6	55,0	54,0	52,4	50,1	45,3	40,1	30,5	-	-
GS FF 80-200-222/A1	222	57,8	65,7	-	66,0	66,1	65,2	63,7	61,5	58,8	54,1	50,0	43,4	35,9	-
GS FF 80-250-220/A1	220	50,8	64,7	-	64,2	63,7	62,8	61,5	59,5	56,8	51,5	45,8	35,7	-	-
GS FF 80-250-238/A1	238	58,5	75,7	-	75,4	75,3	74,9	74,0	72,3	69,8	63,8	57,1	44,4	-	-
GS FF 80-250-261/A1	261	78,9	91,9	-	91,7	91,7	91,3	89,8	87,8	85,0	80,1	75,2	67,1	57,1	-
GS FF 80-250-270/A1	270	89	98,3	-	98,2	98,2	97,9	96,7	94,9	92,6	88,2	83,7	76,2	66,8	-
GS FF 80-315L-265/A1	265	94,1	95,8	-	95,7	95,7	95,5	94,6	93,2	90,9	86,1	80,9	71,2	58,1	-
GS FF 80-315L-280/A1	280	115	107,0	-	106,9	106,9	106,7	106,2	105,1	103,4	99,8	95,7	88,1	77,7	-
GS FF 80-315L-300/A1	300	135,5	123,3	-	123,2	123,0	123,3	123,4	122,9	122,4	119,6	115,7	107,3	94,6	-
GS FF 80-315L-316/A1	316	151,3	137,1	-	136,9	136,8	136,4	136,3	135,8	135,3	132,5	128,8	120,8	108,7	-
GS FF 80-315L-334/A1	334	163,5	152,8	-	151,5	151,2	150,8	150,4	149,6	148,2	144,8	140,7	132,5	120,5	-
GS FF 100-250-210/A1	210	45,7	59,8	-	59,4	58,7	57,6	56,1	54,2	51,9	48,0	44,4	38,6	31,9	-
GS FF 100-250-230/A1	230	65,5	72,4	-	72,0	71,6	70,9	69,9	68,5	66,7	63,2	59,6	53,3	45,2	-
GS FF 100-250-250/A1	250	89,8	86,1	-	85,0	84,6	84,3	83,3	82,2	80,4	77,4	74,6	69,4	63,9	-
GS FF 100-250-265/A1	265	104	99,6	-	98,8	98,6	97,7	97,2	96,5	95,5	93,5	91,2	86,7	80,5	68,8
GS FF 100-315L-285/A1	285	115,3	110,6	-	110,8	110,5	109,8	109,0	107,8	106,4	104,1	102,7	94,7	81,8	55,4
GS FF 100-315L-300/A1	300	143,3	128,8	-	129,4	129,2	128,2	127,1	125,6	123,5	119,7	115,7	108,8	100,0	-
GS FF 100-315L-312/A1	312	164,9	139,2	-	140,0	139,9	139,7	139,3	138,1	136,6	133,1	129,6	122,8	115,5	102,8

Note: highlighted values not selectable for EN 12259-12

EBARA Pumps Europe reserves the right to make modifications without prior notice

PERFORMANCE CURVES SPECIFICATIONS

The specificatons below qualify the curves shown on the following pages.

Tolerances according to ISO 9906:2012 - Grade 2B.
Performance curves are defined with 2900 rpm rotation speed (rated rotation speed of the motor).
Measurements were carried out with clean watar at 20°C of temperature and with kinematic viscosity of Q = 1 mm^2/s (1 cSt).
The NPSH curve is an average curve obtained in the same conditions of the performance curves. During the pump selection, consider to get a safety margin of at least 1 .
The continuos curves indicate the reccomended working range. The dotted curve is only a guide.
In order to avoid the risk of over-heating, the pumps not should be used below the Minimum by-pass flow.
(see the performance curve of the individual models from page 10 to page 25)

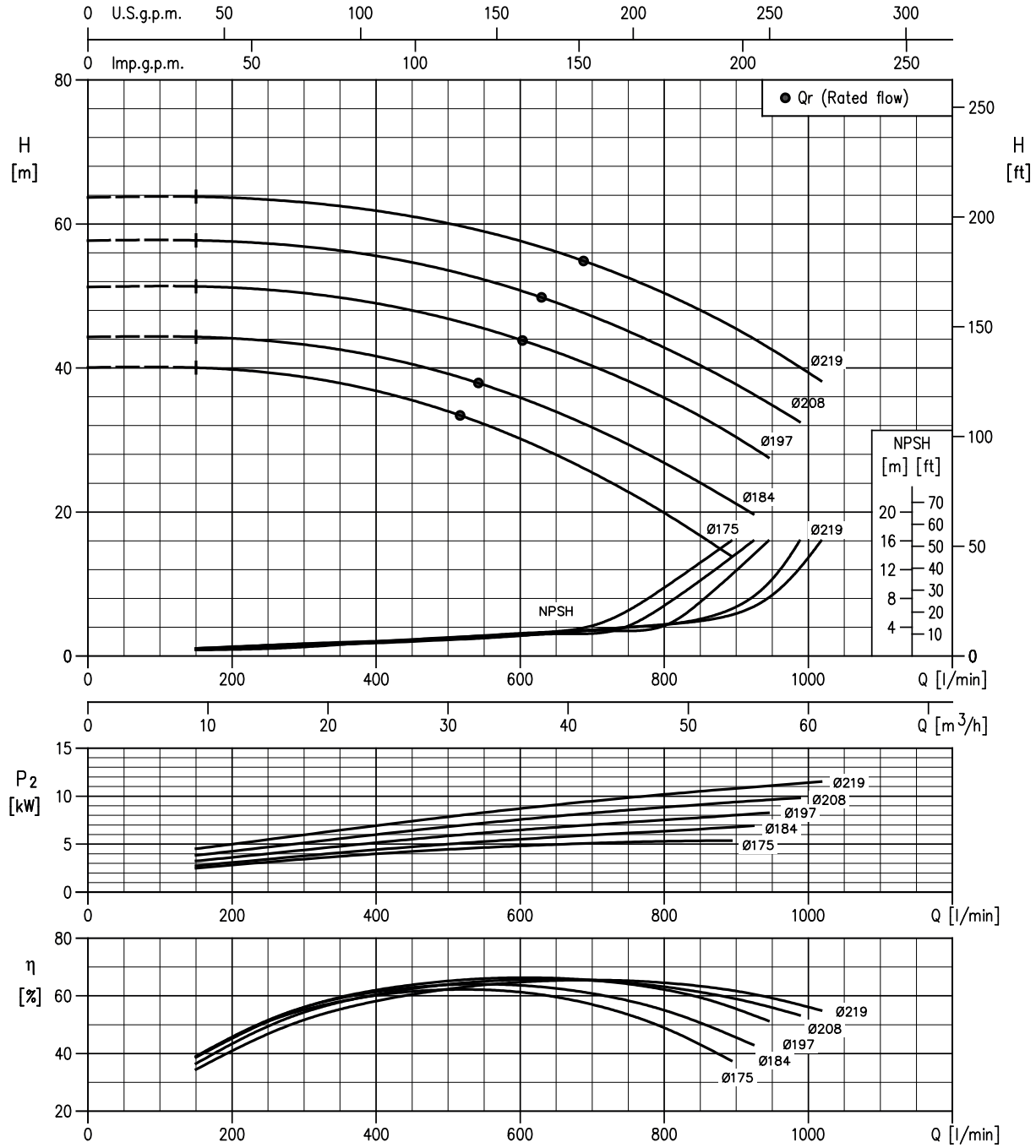
Symbol explanation:
Q = volume flow rate
H = total head
P2 = pump power imput (shaft power)
η = pump efficiency
NPSH = net positive suction head required by the pump
Qr = Rated flow

EBARA Pumps Europe reserves the right to make modifications without prior notice

FIRE-FIGHTING PUMP

GS FF

GS FF 32-200 - impeller diameter = 175 mm
GS FF 32-200 - impeller diameter = 184 mm
GS FF 32-200 - impeller diameter = 197 mm
GS FF 32-200 - impeller diameter = 208 mm
GS FF 32-200 - impeller diameter = 219 mm

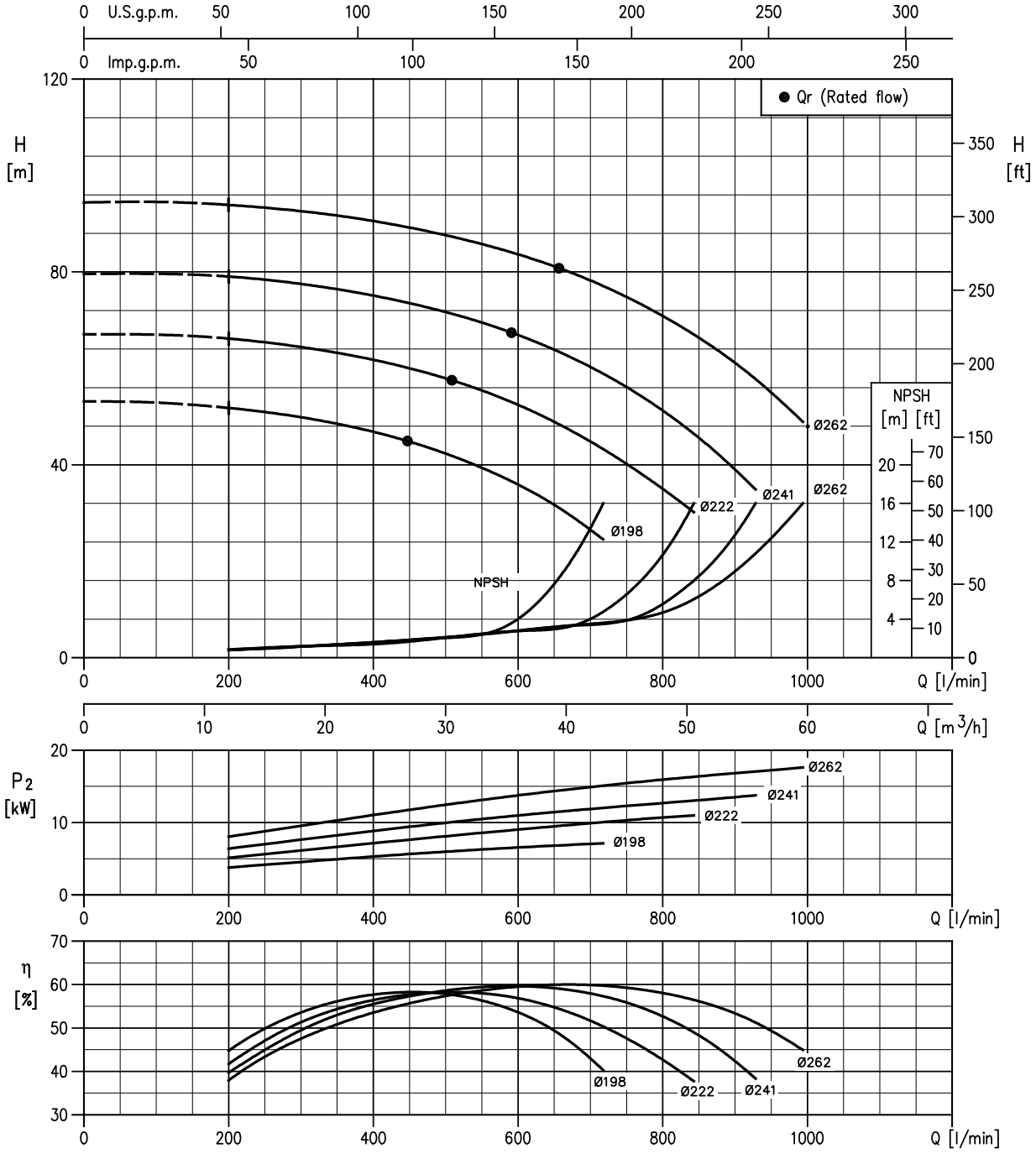


Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 5 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

GS FF FIRE-FIGHTING PUMP

GS FF 32-250 - impeller diameter = 198 mm
GS FF 32-250 - impeller diameter = 222 mm
GS FF 32-250 - impeller diameter = 241 mm
GS FF 32-250 - impeller diameter = 262 mm



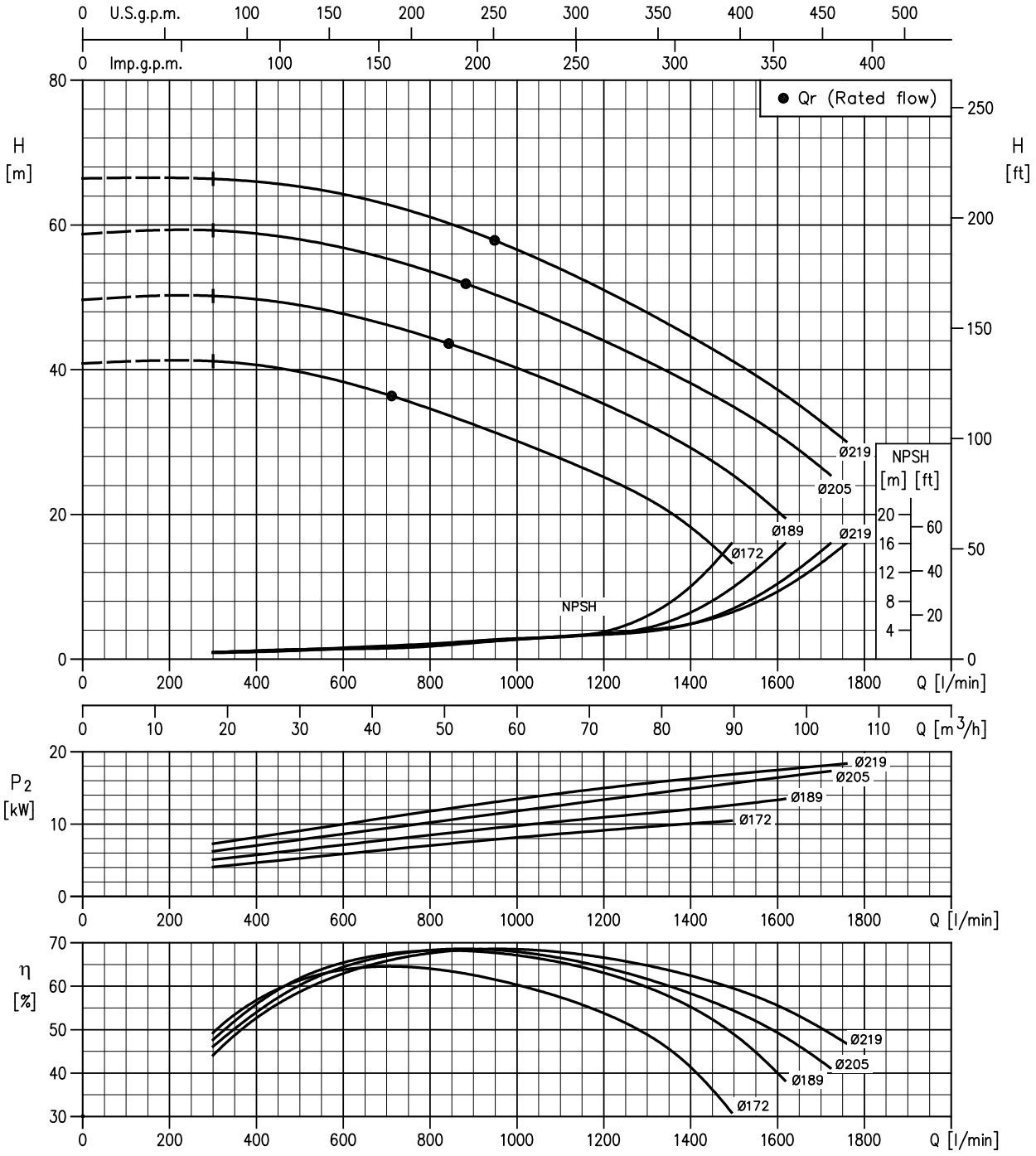
Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 8 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

FIRE-FIGHTING PUMP

GS FF

GS FF 40-200 - impeller diameter = 172 mm
GS FF 40-200 - impeller diameter = 189 mm
GS FF 40-200 - impeller diameter = 205 mm
GS FF 40-200 - impeller diameter = 219 mm

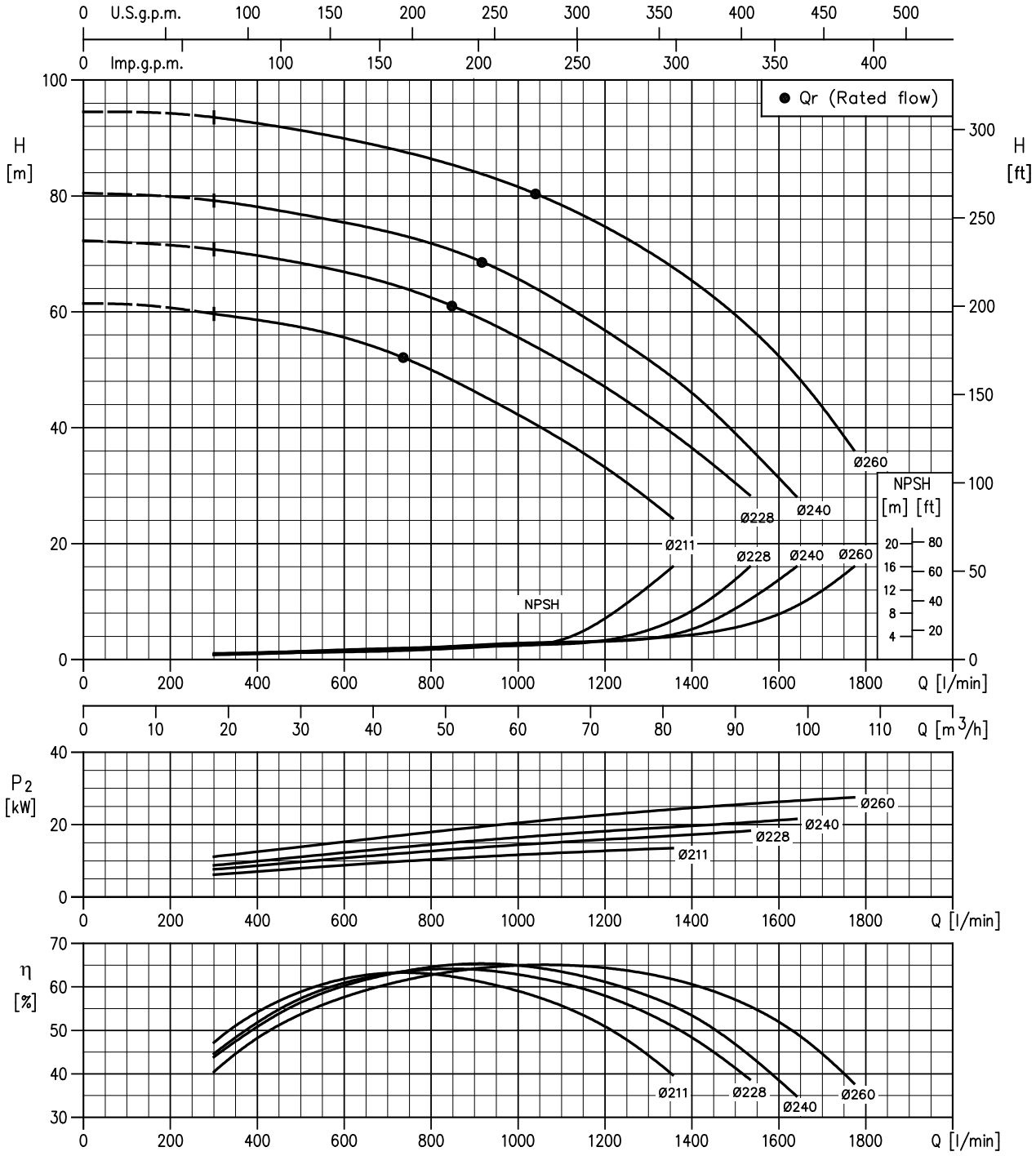


Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 7 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

GS FF FIRE-FIGHTING PUMP

GS FF 40-250 - impeller diameter = 211 mm
GS FF 40-250 - impeller diameter = 228 mm
GS FF 40-250 - impeller diameter = 240 mm
GS FF 40-250 - impeller diameter = 260 mm



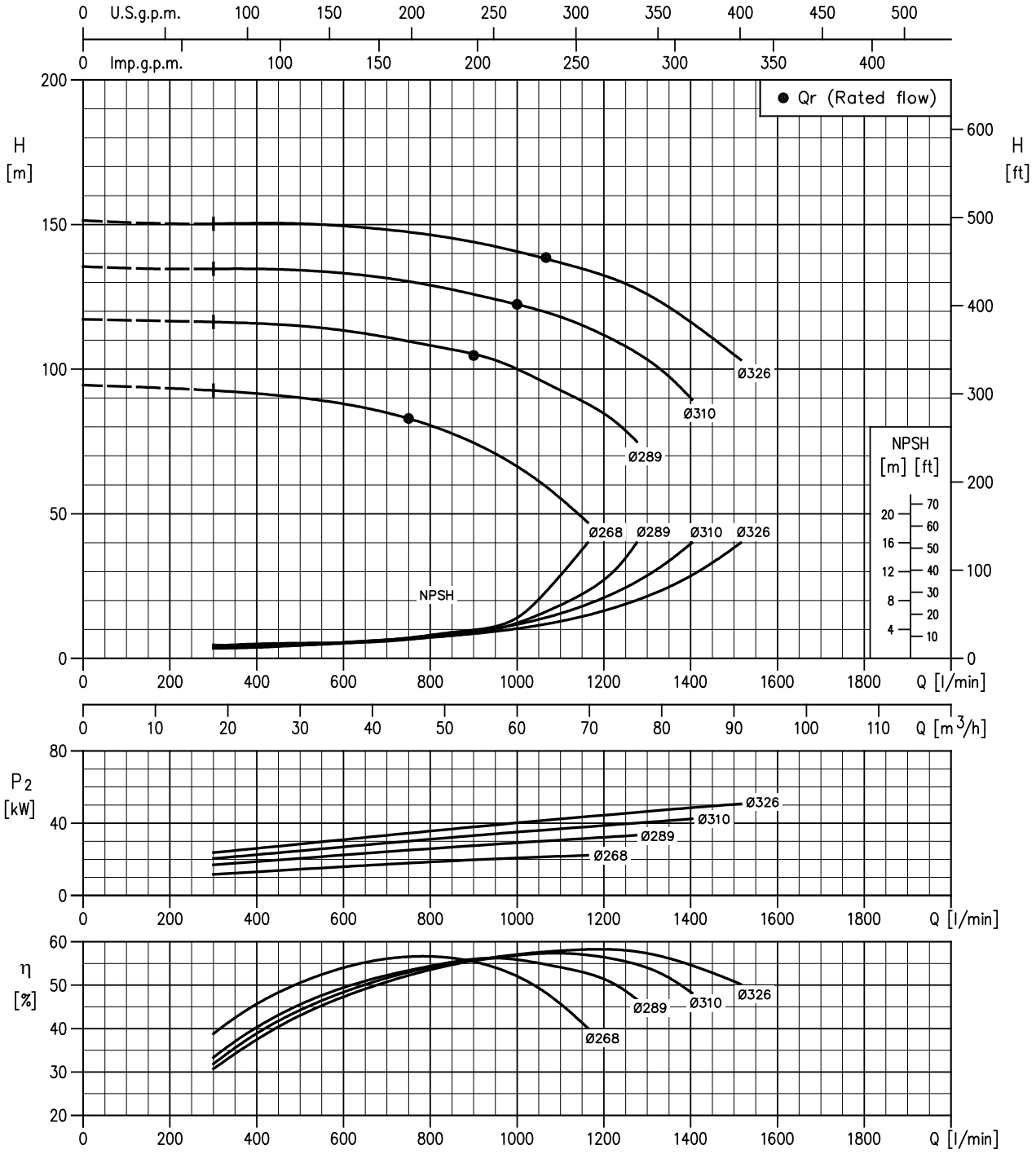
Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 10 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

FIRE-FIGHTING PUMP

GS FF

GS FF 40-315 - impeller diameter = 268 mm
GS FF 40-315 - impeller diameter = 289 mm
GS FF 40-315 - impeller diameter = 310 mm
GS FF 40-315 - impeller diameter = 326 mm

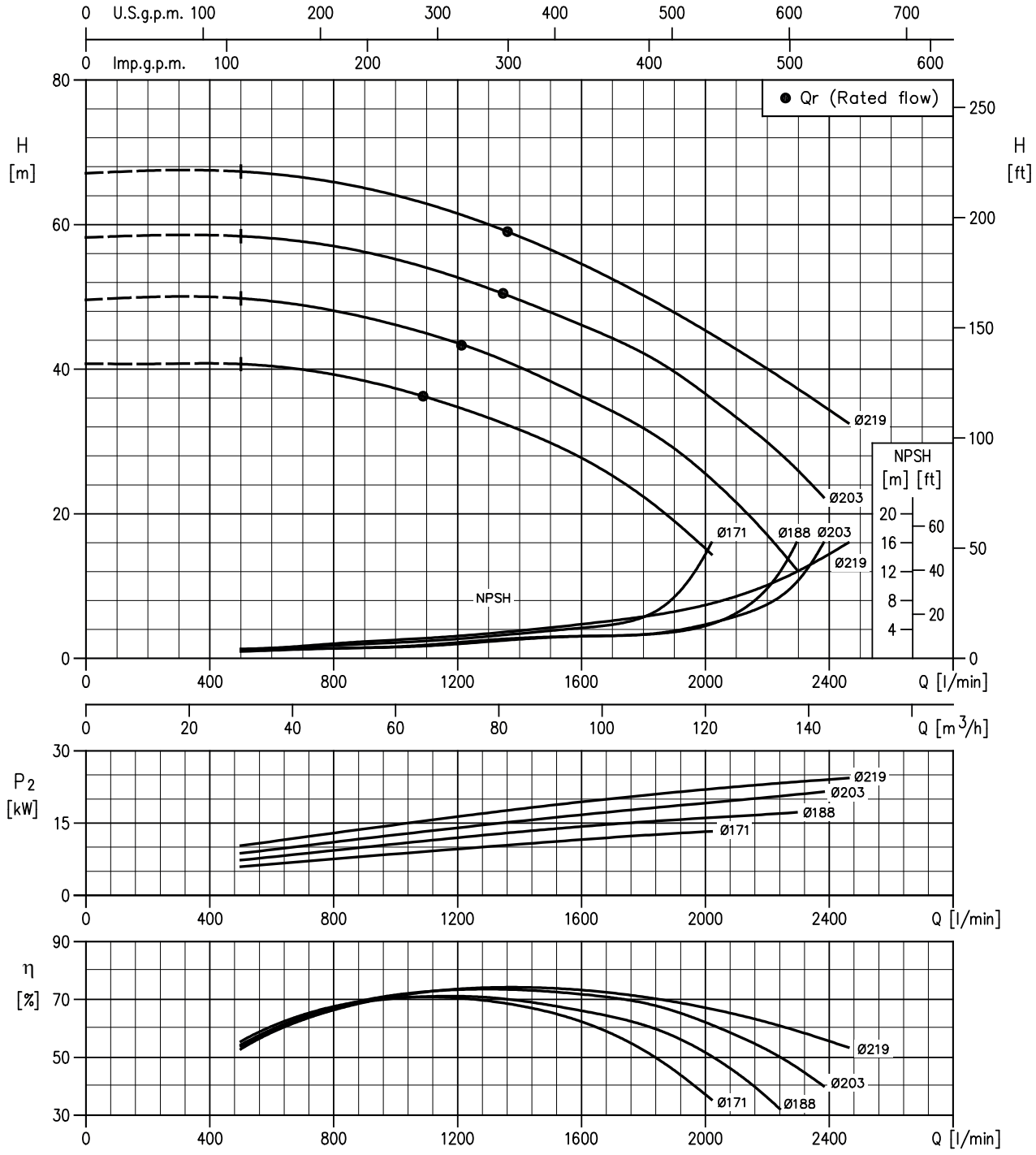


Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 28 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

GS FF FIRE-FIGHTING PUMP

GS FF 50-200 - impeller diameter = 171 mm
GS FF 50-200 - impeller diameter = 188 mm
GS FF 50-200 - impeller diameter = 203 mm
GS FF 50-200 - impeller diameter = 219 mm



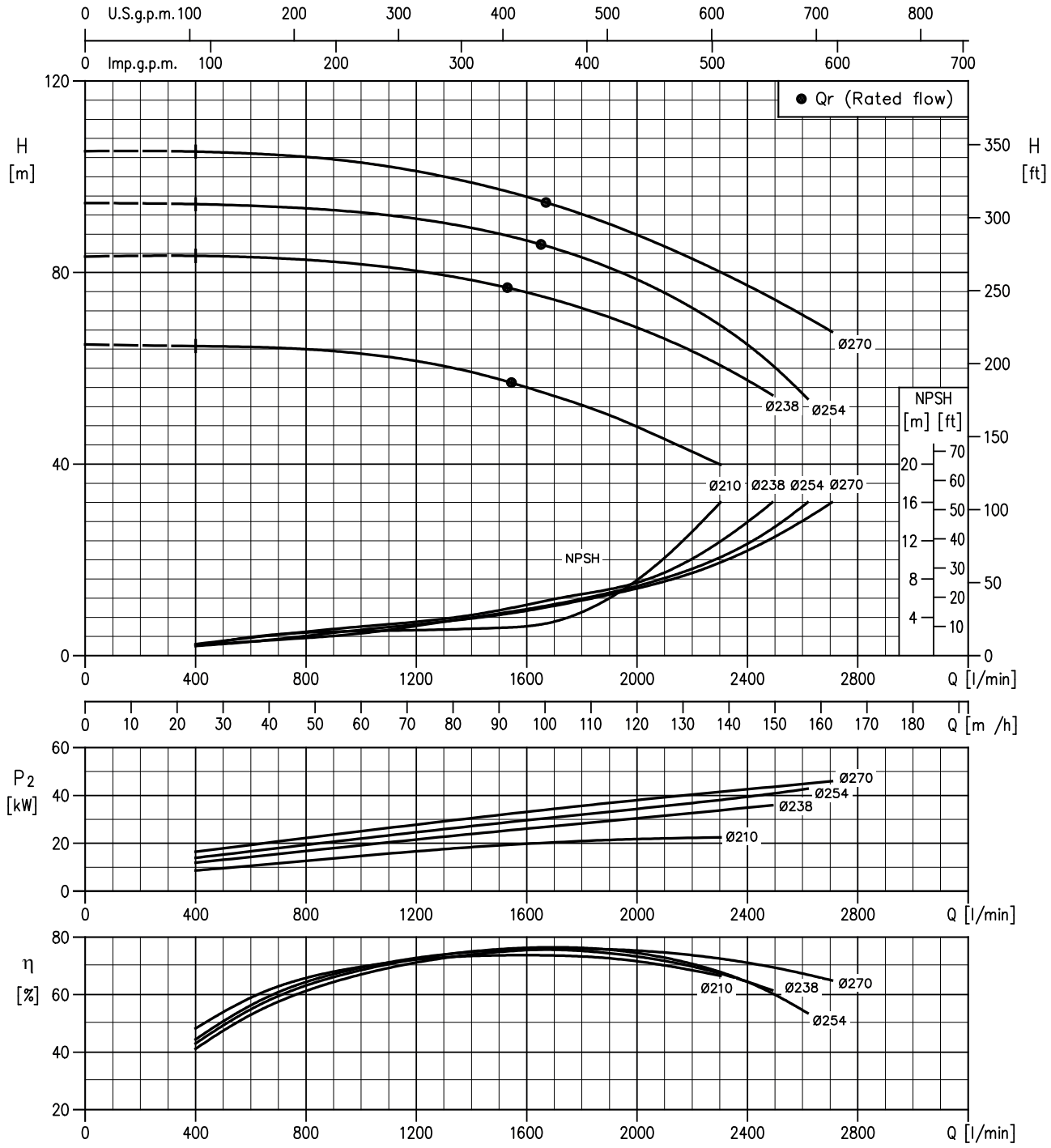
Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 12 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

FIRE-FIGHTING PUMP

GS FF

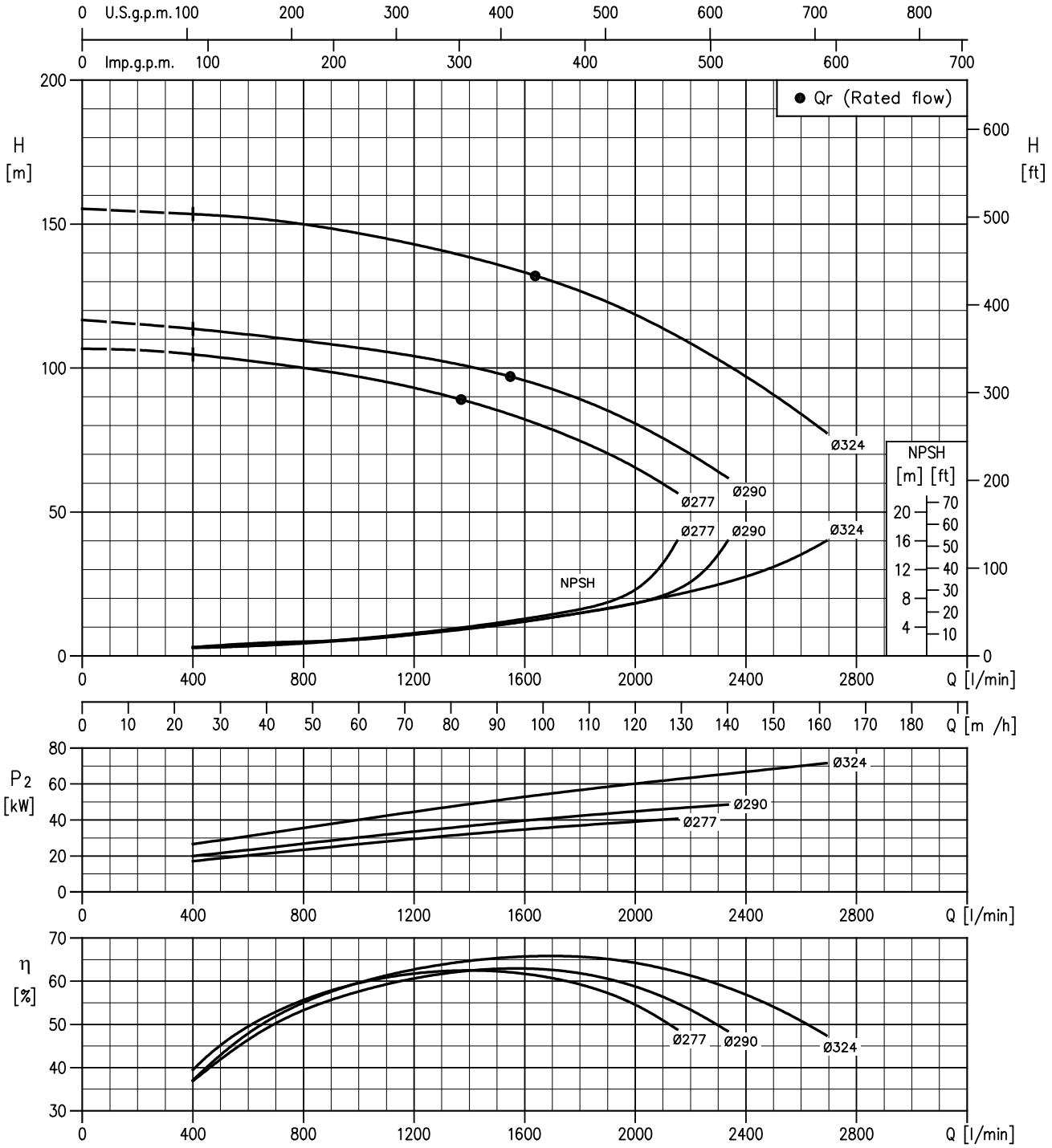
GS FF 50-250 - impeller diameter = 210 mm
GS FF 50-250 - impeller diameter = 238 mm
GS FF 50-250 - impeller diameter = 254 mm
GS FF 50-250 - impeller diameter = 270 mm



Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 23 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

GS FF 50-315 - impeller diameter = 277 mm
GS FF 50-315 - impeller diameter = 290 mm
GS FF 50-315 - impeller diameter = 324 mm



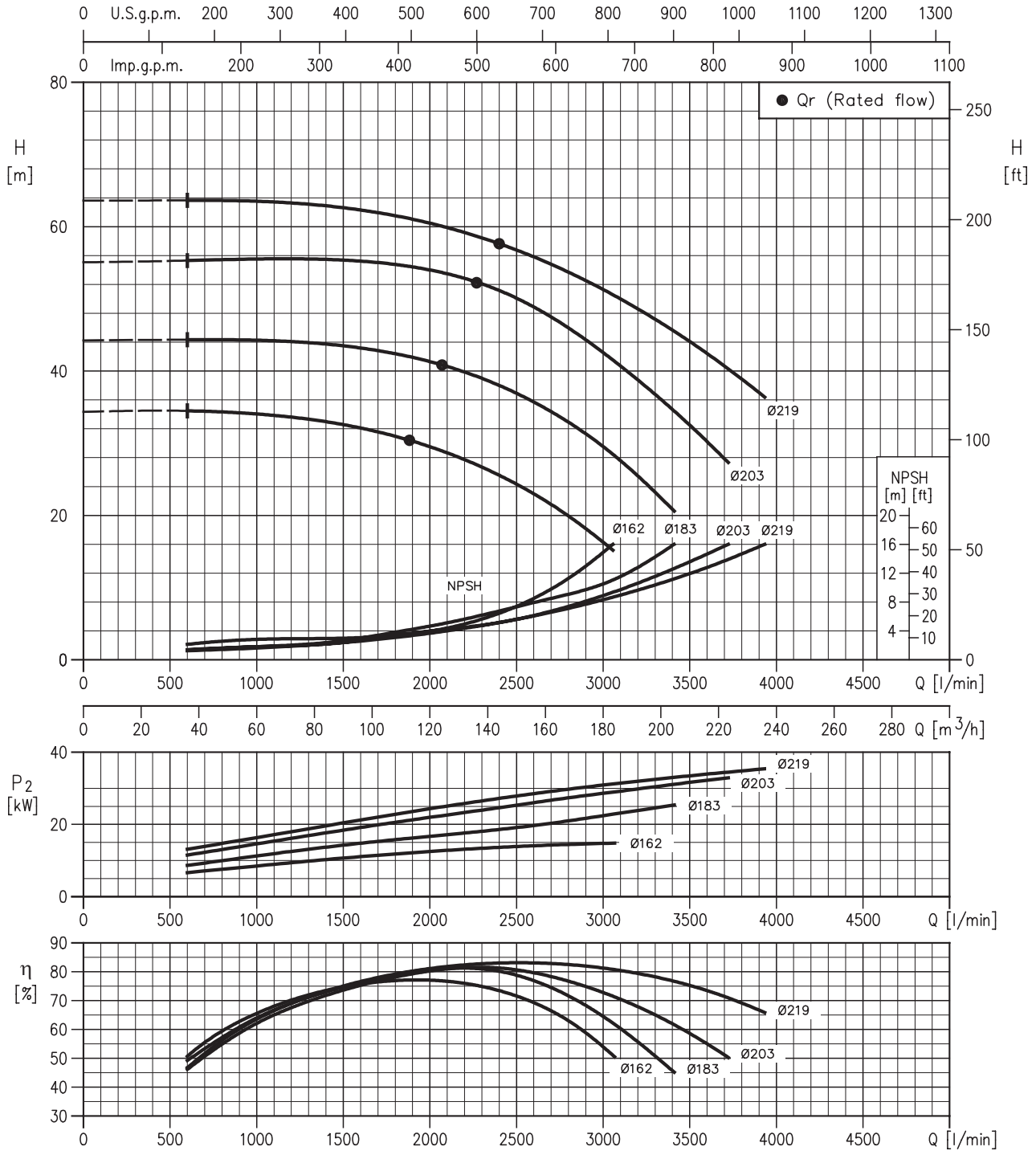
Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 25 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

FIRE-FIGHTING PUMP

GS FF

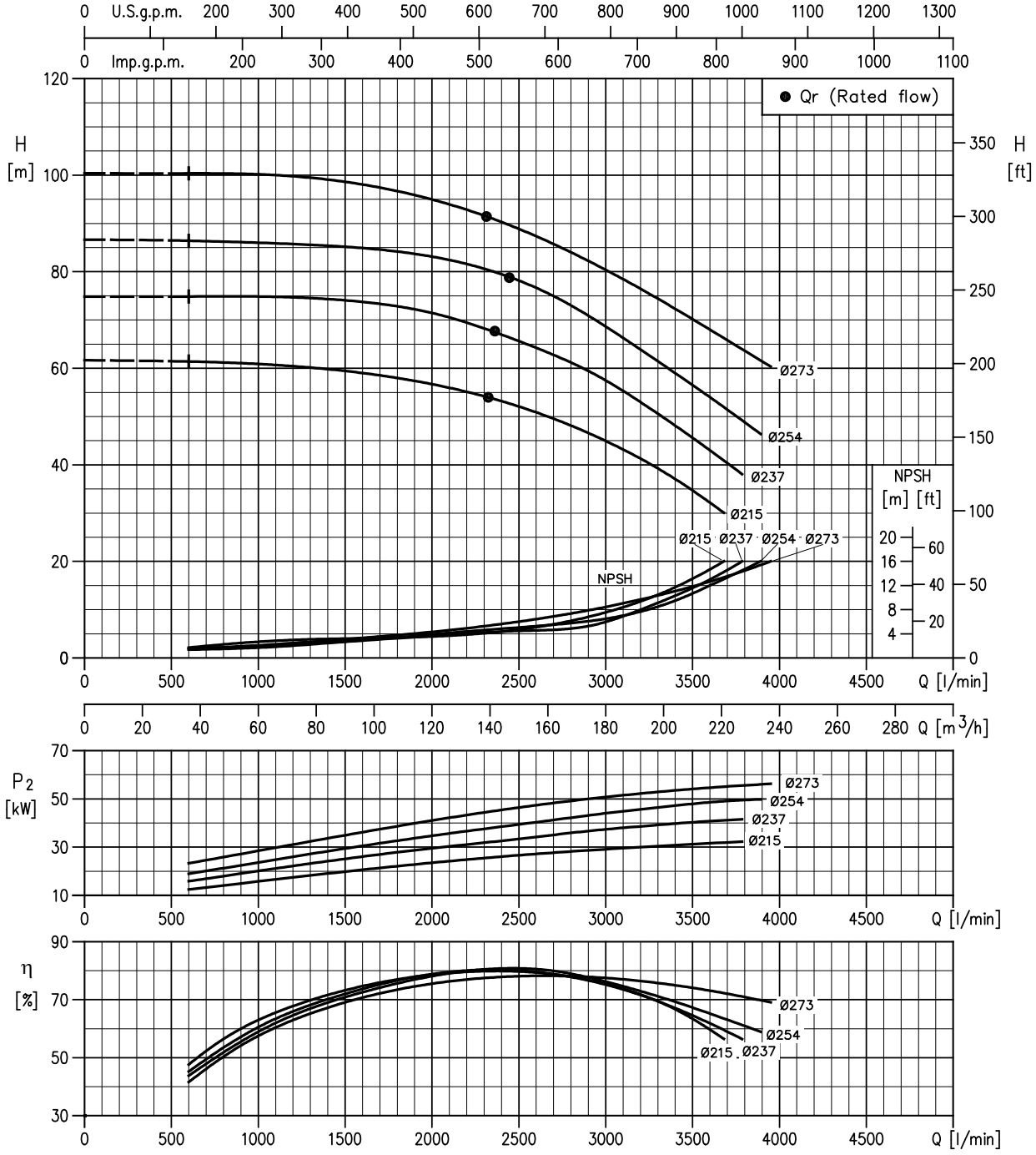
GS FF 65-200 - impeller diameter = 162 mm
GS FF 65-200 - impeller diameter = 183 mm
GS FF 65-200 - impeller diameter = 203 mm
GS FF 65-200 - impeller diameter = 219 mm



Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 28 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

GS FF 65-250 - impeller diameter = 215 mm
GS FF 65-250 - impeller diameter = 237 mm
GS FF 65-250 - impeller diameter = 254 mm
GS FF 65-250 - impeller diameter = 273 mm



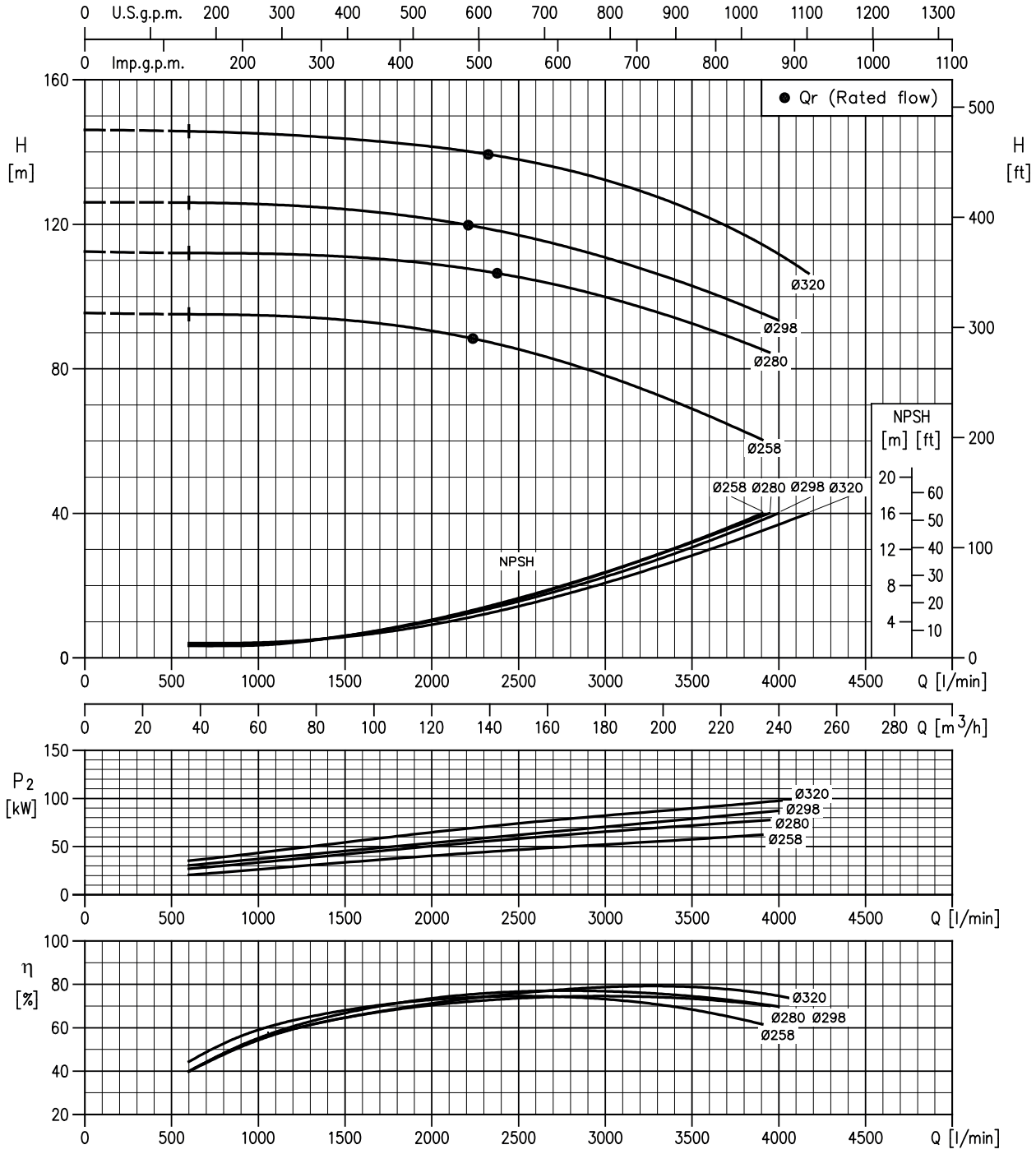
Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 42 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

FIRE-FIGHTING PUMP

GS FF

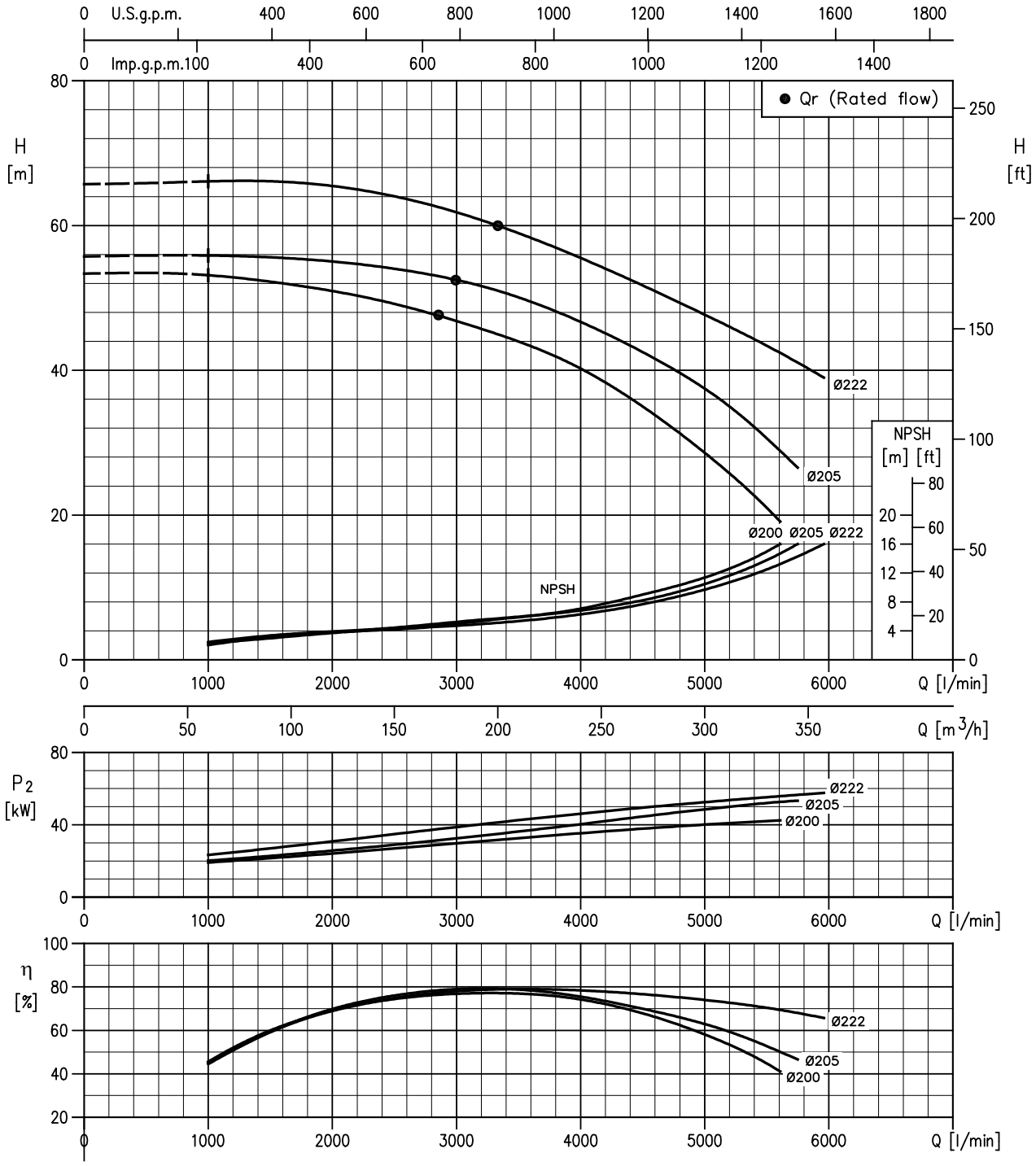
GS FF 65-315 - impeller diameter = 258 mm
GS FF 65-315 - impeller diameter = 280 mm
GS FF 65-315 - impeller diameter = 298 mm
GS FF 65-315 - impeller diameter = 320 mm



Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 55 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

GS FF 80-200 - impeller diameter = 200 mm
GS FF 80-200 - impeller diameter = 205 mm
GS FF 80-200 - impeller diameter = 222 mm



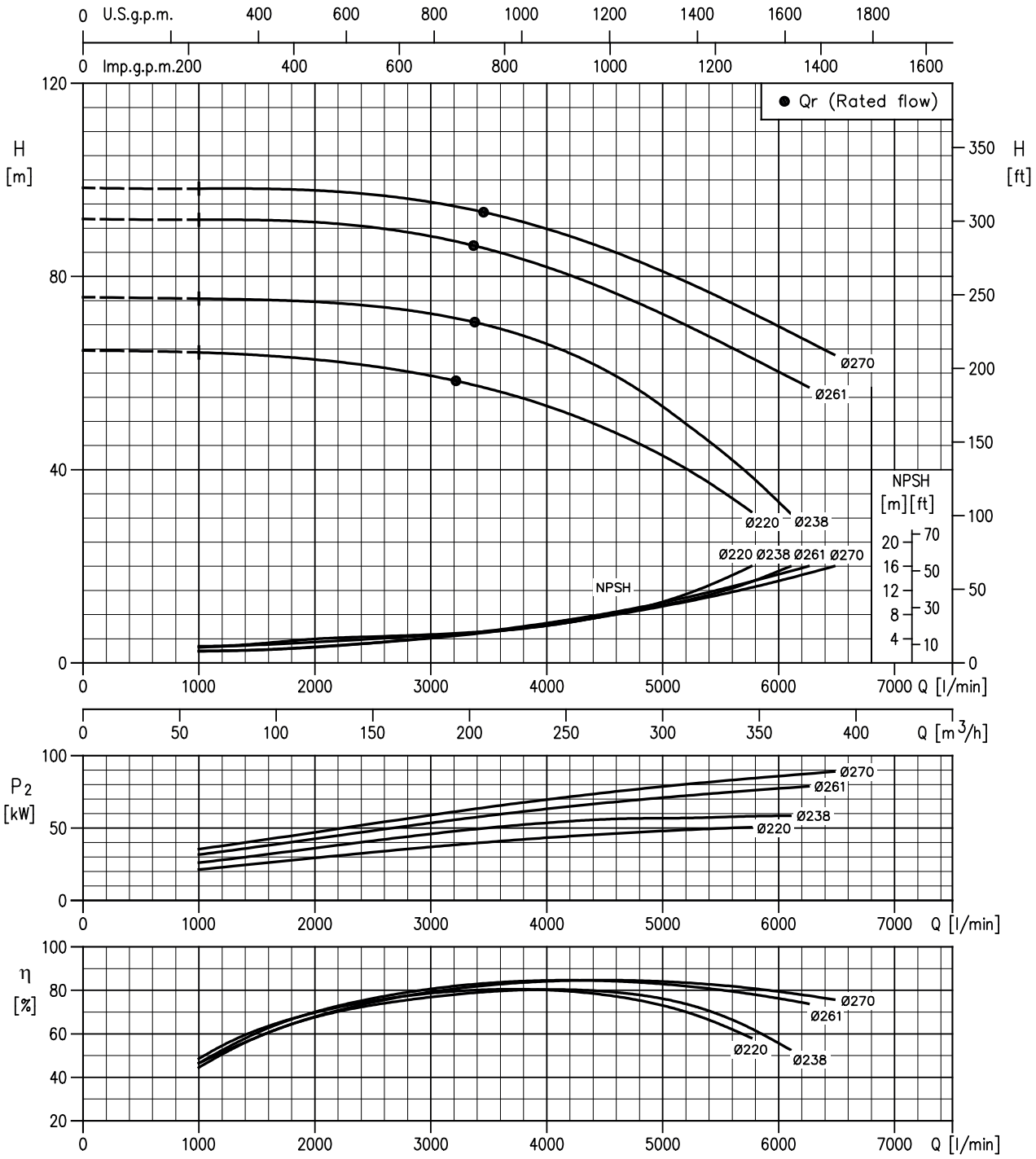
Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 45 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

FIRE-FIGHTING PUMP

GS FF

GS FF 80-250 - impeller diameter = 220 mm
GS FF 80-250 - impeller diameter = 238 mm
GS FF 80-250 - impeller diameter = 261 mm
GS FF 80-250 - impeller diameter = 270 mm

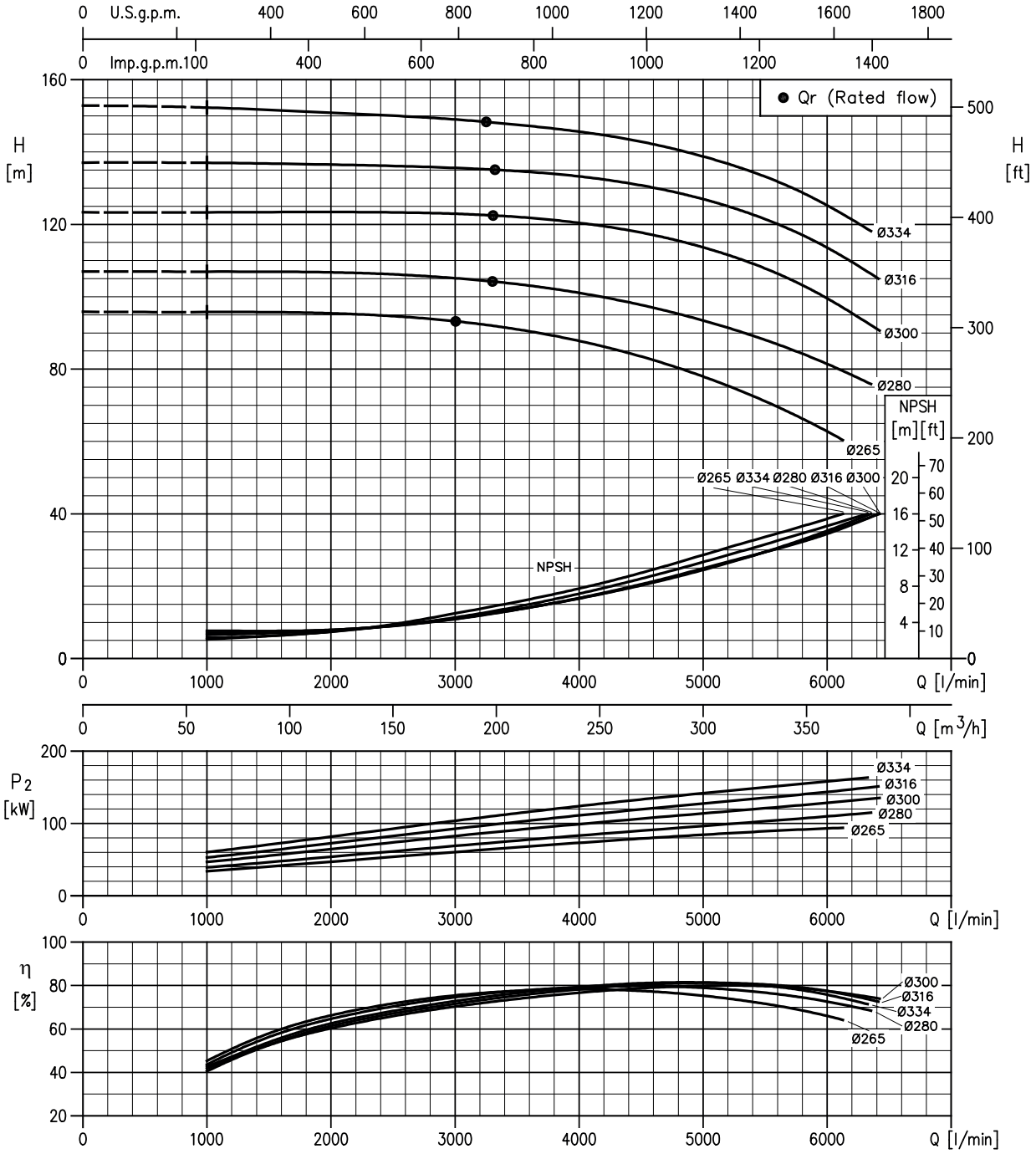


Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 83 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

GS FF FIRE-FIGHTING PUMP

GS FF 80-315L - impeller diameter = 265 mm
GS FF 80-315L - impeller diameter = 280 mm
GS FF 80-315L - impeller diameter = 300 mm
GS FF 80-315L - impeller diameter = 316 mm
GS FF 80-315L - impeller diameter = 334 mm



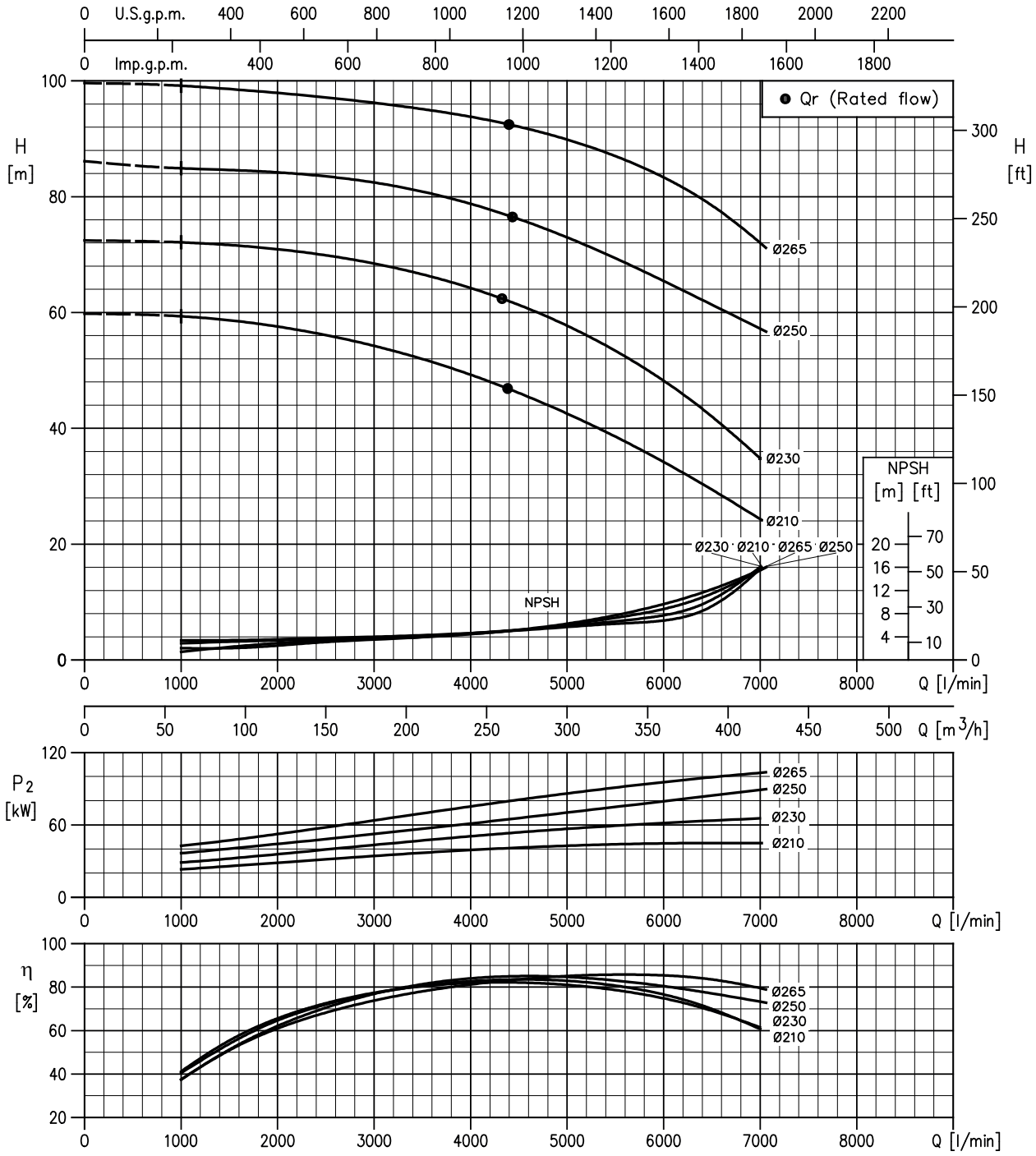
Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 90 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

FIRE-FIGHTING PUMP

GS FF

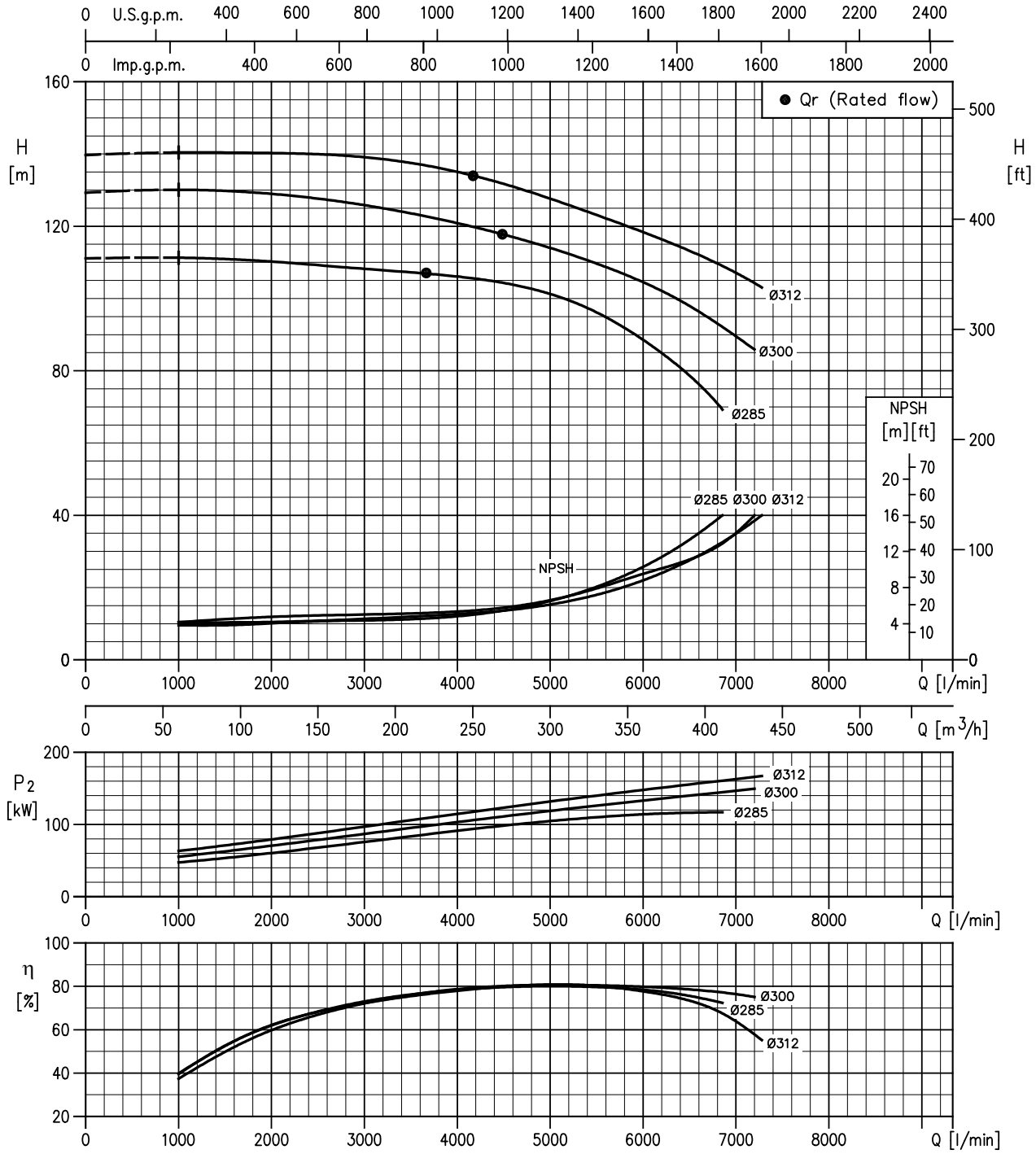
GS FF 100-250 - impeller diameter = 210 mm
GS FF 100-250 - impeller diameter = 230 mm
GS FF 100-250 - impeller diameter = 250 mm
GS FF 100-250 - impeller diameter = 265 mm



Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 125 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

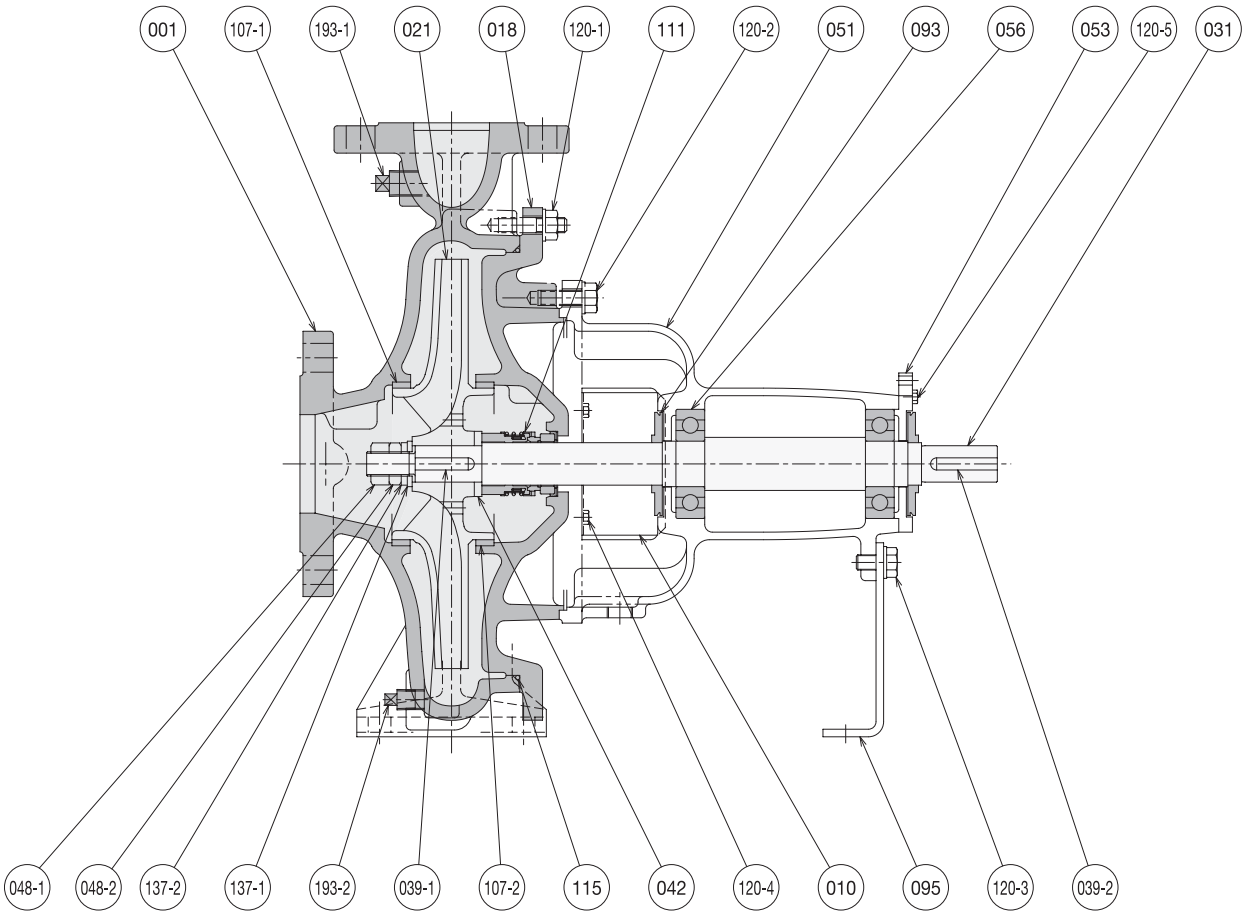
GS FF 100-315L - impeller diameter = 285 mm
GS FF 100-315L - impeller diameter = 300 mm
GS FF 100-315L - impeller diameter = 312 mm



Rated speed ≈2900 min-1
Maximum allowable speed 3000 min-1
Test standard: ISO 9906:2012 - Grade 2B
Minimum bypass flow 120 L/min
Maximum allowable pressure 16 bar

EBARA Pumps Europe reserves the right to make modifications without prior notice

SECTIONAL VIEW



No.	Part name	Qty	No.	Part name	Qty
001	Casing	1	095	Stay	1
010	Protector	2	107-1	Case Wear Ring	1
018	Casing cover	1	107-2	Case Wear Ring	1
021	Impeller	1	111	Mechanical seal	1
031	Shaft	1	115	O-Ring	1
039-1	Key	1	120-1	Bolt	-
039-2	Key	1	120-2	Bolt	6
042	Spacer	1	120-3	Bolt	1
048-1	Impeller nut (A)	1	120-4	Bolt	4
048-2	Impeller nut (B)	1	120-5	Bolt	4
051	Bearing housing	1	137-1	Plain washer	1
053	Bearing cover	1	137-2	Spring lock washer	1
056	Ball bearing	2	193-1	Plug	1
093	Deflector	2	193-2	Plug	1

EBARA Pumps Europe reserves the right to make modifications without prior notice

MATERIALS OF CONSTRUCTION

No.	Part name	Materials	ISO or EN equivalent
001	Casing	Cast iron	EN-GJL-250(EN-JL1040)
010	Protector	Carbon steel	DC01(1.0330)
018	Casing cover	Cast iron	EN-GJL-250(EN-JL1040)
021	Impeller	Bronze	CuSn5Zn5Pb5(CC491K)
031	Shaft	Cr. steel	X17CrNi16-2(1.4057)
039-1	Key	12% Cr. steel	X30Cr13(1.4028)
039-2	Key	Carbon steel	C50(1.0540)
042	Spacer	304 Stainless steel	X5CrNi18-10(1.4301)
048-1	Impeller nut (A)	304 Stainless steel	X5CrNi18-10(1.4301)
048-2	Impeller nut (B)	304 Stainless steel	X5CrNi18-10(1.4301)
051	Bearing housing	Cast iron	EN-GJL-150(EN-JL1020)
053	Bearing cover	Cast iron	EN-GJL-150(EN-JL1020)
056	Ball bearing	Steel	---
093	Deflector	EPDM	---
095	Stay	Carbon steel	---
107-1	Case Wear Ring	Bronze	CuSn5Zn5Pb5(CC491K)
107-2	Case Wear Ring	Bronze	CuSn5Zn5Pb5(CC491K)
111	Mechanical Seal	Sic/carbon/EPDM	---
115	O-Ring	EPDM	---
120-1/5	Bolts	Carbon steel	---
137-1	Plain Washer	304 Stainless steel	X5CrNi18-10(1.4301)
137-2	Spring Lock Washer	304 Stainless steel	X5CrNi18-10(1.4301)
193-1	Plug	Carbon steel	---
193-2	Plug	Carbon steel	---

EBARA Pumps Europe reserves the right to make modifications without prior notice

NOMINAL DIMENSIONS OF PARTS

Model	Shaft No.	Case Wear Ring Front side [mm]	Case Wear Ring Back side [mm]	Casing O-Ring [mm]	Ball Bearing type
GS 32-200	230	76	76	3.53X234.54	6306ZZ
GS 32-250	230	76	76	3.53X278.99	6306ZZ
GS 40-200	230	88	88	3.53X234.54	6306ZZ
GS 40-250	230	88	88	3.53X278.99	6306ZZ
GS 40-315	240	100	100	3.53X355.19	6308ZZ
GS 50-200	230	100	100	3.53X234.54	6306ZZ
GS 50-250	230	100	100	3.53X278.99	6306ZZ
GS 50-315	240	116	116	3.53X355.19	6308ZZ
GS 65-200	230	116	116	3.53X234.54	6306ZZ
GS 65-250	240	116	116	3.53X278.99	6308ZZ
GS 65-315	240	132	132	3.53X355.19	6308ZZ
GS 80-200	240	132	132	3.53X234.54	6308ZZ
GS 80-250	240	148	148	3.53X278.99	6308ZZ
GS 80-315L	250	148	148	3.53X355.19	6310ZZ
GS100-250	240	158	158	3.53X278.99	6308ZZ
GS100-315L	250	158	162	3.53X355.19	6310ZZ

Note: Materials of every components is specified in the section of "Materials of Construction".

INTERCHANGEABILITY CHART

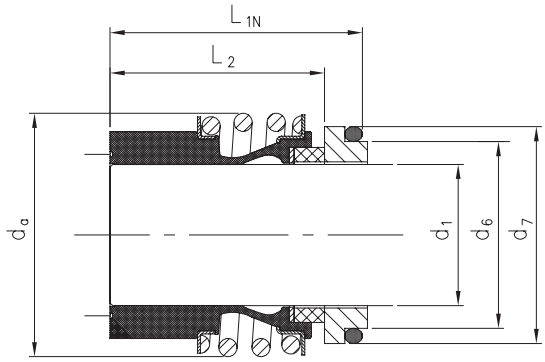
Model	Shaft No.	Impeller	Ball Bearing	Deflector	Case Wear Ring (front side)	Case Wear Ring (back side)	O Ring (for casing)	Mechanical Seal version
GS 32-200	230	Depend on each model	A	A	A	A	B	A
GS 32-250	230		A	A	A	A	C	A
GS 40-200	230		A	A	B	B	B	A
GS 40-250	230		A	A	B	B	C	A
GS 40-315	240		B	B	C	C	D	B
GS 50-200	230		A	A	C	C	B	A
GS 50-250	230		A	A	C	C	C	A
GS 50-315	240		B	B	D	D	D	B
GS 65-200	230		A	A	D	D	B	A
GS 65-250	240		B	B	D	D	C	B
GS 65-315	240		B	B	E	E	D	B
GS 80-200	240		B	B	E	E	B	B
GS 80-250	240		B	B	F	F	C	B
GS 80-315L	250		C	C	F	F	D	C
GS 100-250	240		B	B	H	H	C	B
GS 100-315L	250		C	C	H	I	D	C

Note: Materials of every components is specified in the section of "Materials of Construction".
The same letter in the same vertical column means component is interchangeable.

EBARA Pumps Europe reserves the right to make modifications without prior notice

SELECTION OF SHAFT SEAL

MECHANICAL SEAL



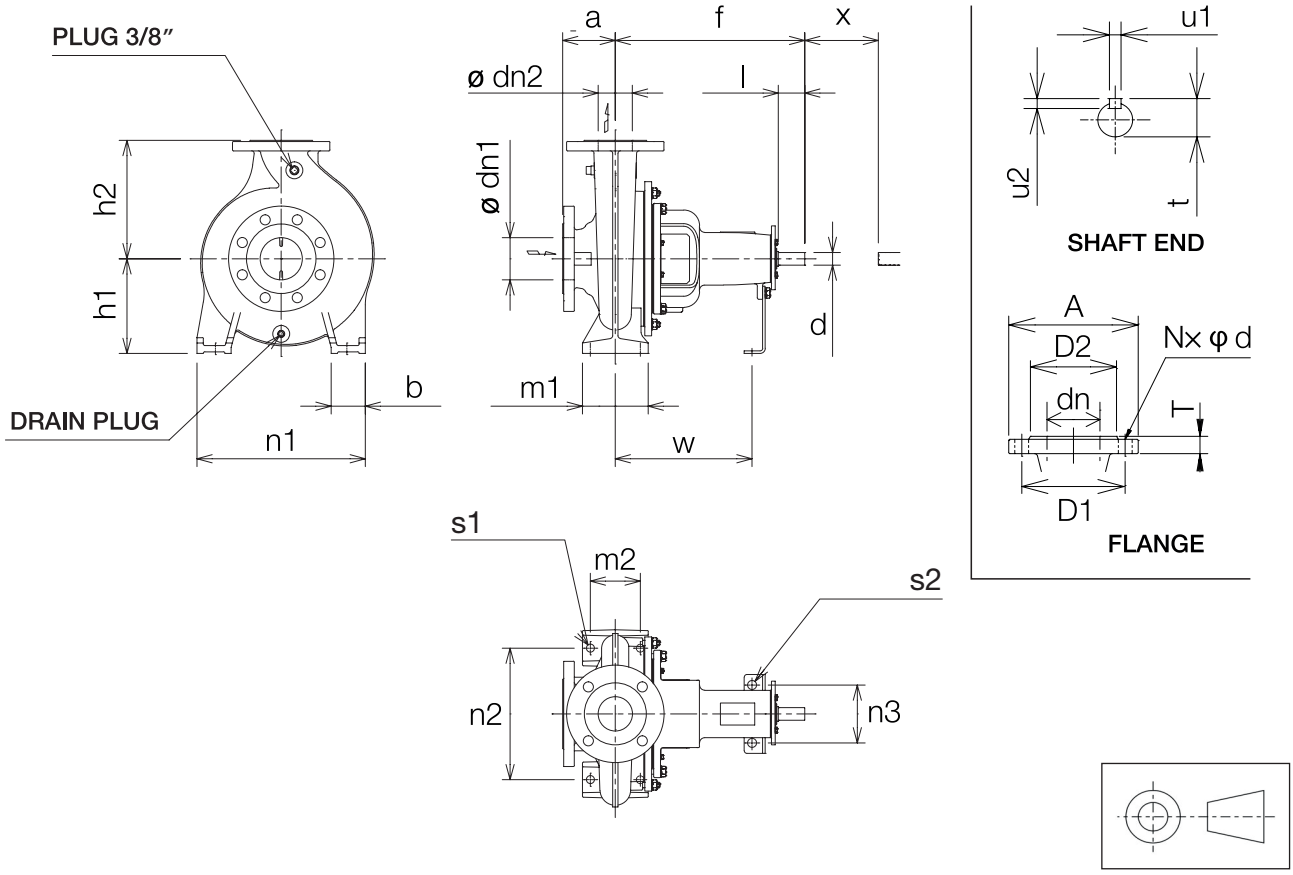
Mechanical seal	Dimensions [mm]					
	d1	da	d6	d7	L_{1N}	L_2
A	28	49	37	43	50	42,5
B	38	59	49	56	55	46
C	48	70,5	59	66	60	51

Note: for correspondance between seal and pump model, please see page 30

Liquid temperature	Liquid	Rotating part	Fixed part	Elastomers	Spring
-10 to 120 °C	Clean water, hot water, water with glicole (30%)	Silicon carbide (Q7)	Carbon graphite resin impregnated (B)	Ethylene propylene rubber - EPDM (E)	AISI 316 (G)

EBARA Pumps Europe reserves the right to make modifications without prior notice

FIRE-FIGHTING PUMP GS FF

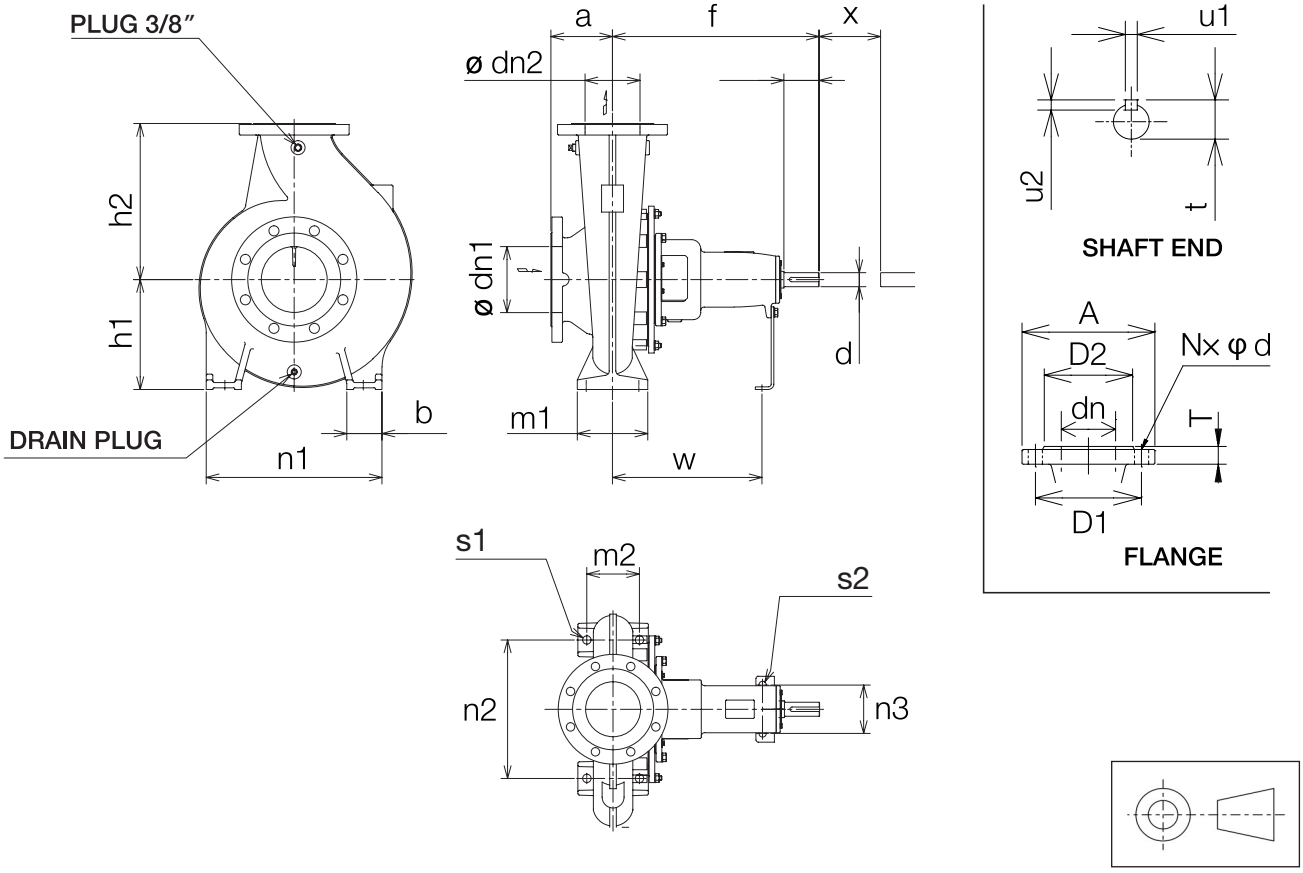


Model	Dimensions [mm]													
	Suction flange							Discharge flange						
	dn1	A	D1	D2	T	N	d	dn2	A	D1	D2	T	N	d
GS 32	50	165	125	99	20	4	19	32	140	100	76	18	4	19
GS 40	65	185	145	118	20	4	19	40	150	110	84	18	4	19
GS 50	65	185	145	118	20	4	19	50	165	125	99	20	4	19
GS 65	80	200	160	132	22	8	19	65	185	145	118	20	4	19
GS 80	100	220	180	156	24	8	19	80	200	160	132	22	8	19

Model	ø	ø	Pump					Support							Holes for Bolts		Shaft End						Weight [kg]
	dn1	dn2	a	f	h1	h2	Drain plug	b	m1	m2	n1	n2	n3	W	s1	s2	d	l	t	u1	u2	X	
GS 32-200	50	32	80	360	160	180	¼"	50	100	70	240	190	110	260	M12	M12	24	50	27	8	7	100	39
GS 32-250	50	32	100	360	180	225	¼"	65	125	95	320	250	110	260	M12	M12	24	50	27	8	7	100	46
GS 40-200	65	40	100	360	160	180	¼"	50	100	70	265	212	110	260	M12	M12	24	50	27	8	7	100	41
GS 40-250	65	40	100	360	180	225	¼"	65	125	95	320	250	110	260	M12	M12	24	50	27	8	7	100	48
GS 40-315	65	40	125	470	225	250	¼"	65	125	95	345	280	110	340	M12	M12	32	80	35	10	8	100	82
GS 50-200	65	50	100	360	160	200	¼"	50	100	70	265	212	110	260	M12	M12	24	50	27	8	7	100	44
GS 50-250	65	50	100	360	180	225	¼"	65	125	95	320	250	110	260	M12	M12	24	50	27	8	7	100	50
GS 50-315	65	50	125	470	225	280	¼"	65	125	95	345	280	110	340	M12	M12	32	80	35	10	8	100	86
GS 65-200	80	65	100	360	180	225	¼"	65	125	95	320	250	110	260	M12	M12	24	50	27	8	7	140	47
GS 65-250	80	65	100	470	200	250	¼"	80	160	120	360	280	110	340	M16	M12	32	80	35	10	8	140	73
GS 65-315	80	65	125	470	225	280	¼"	80	160	120	400	315	110	340	M16	M12	32	80	35	10	8	140	90
GS 80-200	100	80	125	470	180	250	¼"	65	125	95	345	280	110	340	M12	M12	32	80	35	10	8	140	67
GS 80-250	100	80	125	470	200	280	¼"	80	160	120	400	315	110	340	M16	M12	32	80	35	10	8	140	77
GS 80-315L	100	80	125	530	250	315	¼"	80	160	120	400	315	110	370	M16	M12	42	110	45	12	8	140	112

EBARA Pumps Europe reserves the right to make modifications without prior notice

GS FF FIRE-FIGHTING PUMP

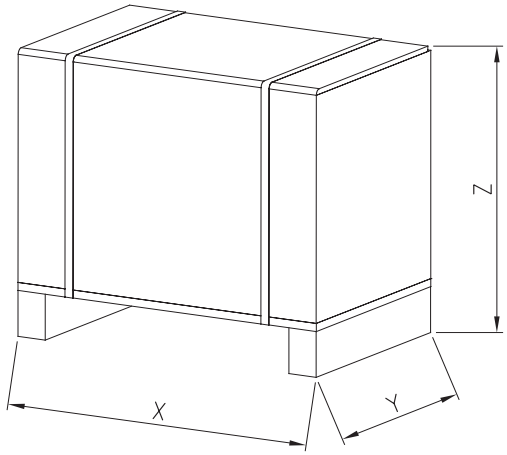


Model	Dimensions [mm]													
	Suction flange							Discharge flange						
	dn1	A	D1	D2	T	N	d	dn2	A	D1	D2	T	N	d
GS 100	125	250	210	184	26	8	19	100	220	180	156	24	8	19

Model	ø dn1	ø dn2	Pump a	f	h1	h2	Drain plug	Support b	m1	m2	n1	n2	n3	W	Holes for Bolts s1	s2	Shaft End d	l	t	u1	u2	X	Weight [kg]
GS 100-250	125	100	140	470	225	280	3/8"	80	160	120	400	315	110	340	M16	M12	32	80	35	10	8	140	108
GS 100-315L	125	100	140	530	250	315	3/8"	80	160	120	400	315	110	370	M16	M12	42	110	45	12	8	140	134

EBARA Pumps Europe reserves the right to make modifications without prior notice

PACKING



Model	X	Y	Z	Weight [kg]
GS 32-200	580	350	498	43
GS 32-250	600	390	553	51
GS 40-200	600	390	553	46
GS 40-250	600	390	553	53
GS 40-315	780	475	633	92
GS 50-200	600	390	553	49
GS 50-250	600	390	553	55
GS 50-315	800	600	775	96
GS 65-200	600	390	553	52
GS 65-250	780	475	633	83
GS 65-315	800	600	775	105
GS 80-200	780	475	633	77
GS 80-250	780	475	633	87
GS 80-315L	800	600	775	127
GS 100-250	800	600	775	123
GS 100-315L	800	600	775	149

EBARA Pumps Europe reserves the right to make modifications without prior notice



Japanese Technology since 1912

www.ebaraeurope.com

The contents of this publication must not be considered binding.
EBARA Pumps Europe S.p.A. reserves the right to make any modifications considered necessary without prior notice.

REV.0 03/2026

EBARA Pumps Europe S.p.A.
Via Torri di Confine 2/1 int. C
36053 Gambellara (Vicenza), Italy
Phone +39 0444 706811
ebarapumps.epe@ebara.com
www.ebaraeurope.com

EBARA Pumps Europe S.p.A. UK
Unit A, Park 34
Collett Way - Didcot
Oxfordshire - OX11 7WB, United Kingdom
Phone +44 1895 439027
marketing.epuk@ebara.com

EBARA POMPY POLSKA Sp. z o.o.
ul. Działkowa 115 A
02-234 Warszawa, Poland
Phone +48 22 3909920
marketing.epl@ebara.com

EBARA Pumps Europe S.p.A. GERMANY
Elisabeth-Selbert-Straße 2
63110 Rodgau, Germany
Phone +49 (0) 6106-660 99-0
info.epde@ebara.com

EBARA Pumps Europe S.p.A. FRANCE
122, Rue Pasteur
69780 Toussieu, France
Phone: +33 04 72 76 94 82
mktg.efr@ebara.com

EBARA Pumps Europe Nordic
Gustav III Boulevard 34,
169 73 Solna, Sweden
info.epen@ebara.com

EBARA Pumps South Africa (PTY) LTD
26 Kyalami Boulevard,
Kyalami Business Park, 1684, Midrand,
Gauteng, South Africa
Phone +27 11 466 1844
ebara.epsa@ebara.com

EBARA Pumps East Africa
Sunflag Industrial Park, Unit 5, Mombasa Road,
P.O BOX 18851-00100, Nairobi, Kenya
Tel. +254709491900
info.epea@ebara.com
www.ebaraeurope.co.ke

EBARA West Africa Limited
ewasales.epe@ebara.com