

Pressure Booster System

Hya-Solo EV

Type Series Booklet



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Type Series Booklet Hya-Solo EV

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Contents

Building Services: Water Supply	4
Pressure Booster Systems	4
Hya-Solo EV	4
Main applications	4
Fluids handled	4
Operating data	4
Designation	4
Design details	4
Materials	4
Product benefits	5
Selection information	5
Technical data	5
Hya-Solo EV 1/0206 B, 1/0406 B, 1/0605 B	6
Characteristic curves	7
Dimensions	10

Building Services: Water Supply

Pressure Booster Systems

Hya-Solo EV



Main applications

- Spray irrigation systems
- General irrigation systems
- Service water supply systems
- Domestic water supply
- Rainwater harvesting
- Water supply systems

Fluids handled

- Drinking water
- Service water
- Cooling water
- Fluids not chemically or mechanically aggressive to the materials

Operating data

Operating properties

Characteristic		Value
Flow rate	Q [m ³ /h]	≤ 6
	Q [l/s]	≤ 1,7
Head	H [m]	≤ 50
Fluid temperature	T [°C]	≤ 60
Operating pressure	p [bar]	≤ 10

Designation

Example: Hya-Solo EV 1 / 0406 / 2 B

Key to the designation

Code	Description
Hya-Solo	Type series
EV	Single-phase AC, speed-controlled
1	Number of pumps
04	Pump size
06	Number of pump stages
2	Inlet pressure [bar]
B	Design status

Design details

Design

- Fully automatic pressure booster package system
- Speed-controlled
- Baseplate-mounted
- Membrane-type accumulator (direct-flow) to DIN 4807-5 on the discharge side, approved for drinking water
- 1.5 m power cable with shockproof plug

Installation type

- Stationary installation

Drive

- Single-phase AC motor with frequency inverter
- 230 V - 50 Hz
- IP55 enclosure
- Thermal class F

Automation

- IP65 frequency inverter for pressure-controlled starting and stopping
- Function/fault indicated
- Reset key

Materials

Overview of available materials

Component	Material
Pump	
Pump casing	Stainless steel
Pump shroud	Stainless steel
Hydraulic system	Stainless steel
Sealing element	EPDM
Plain bearing	Aluminium oxide
Mechanical seal	Complies with EN 12756
Primary ring	Silicon carbide
Mating ring	Hard carbon
Elastomer	EPDM
Piping	
Hya-Solo EV	Brass-gunmetal / chrome steel
Frequency inverter housing	
Heat sink	Die-cast aluminium
Housing cover	PBT, glass fibre reinforced
Accumulator	
	Connection made of stainless steel, flow through valve to DIN 4807-5
Membrane	
	Approved for drinking water

Product benefits

- Corrosion-resistant design with high-quality stainless steel
- Space-saving
- Energy-efficient operating mode
- Easily connected to power supply by shockproof plug
- Optimum monitoring by means of integrated dry running protection ensures high operating reliability.

Selection information

Selection example

Requirements:

Specified duty point at:

- Flow rate: 4 m³/h
- Head: 42 m

Solution:

1. The values are transferred to the selection chart to select the most suitable pump.

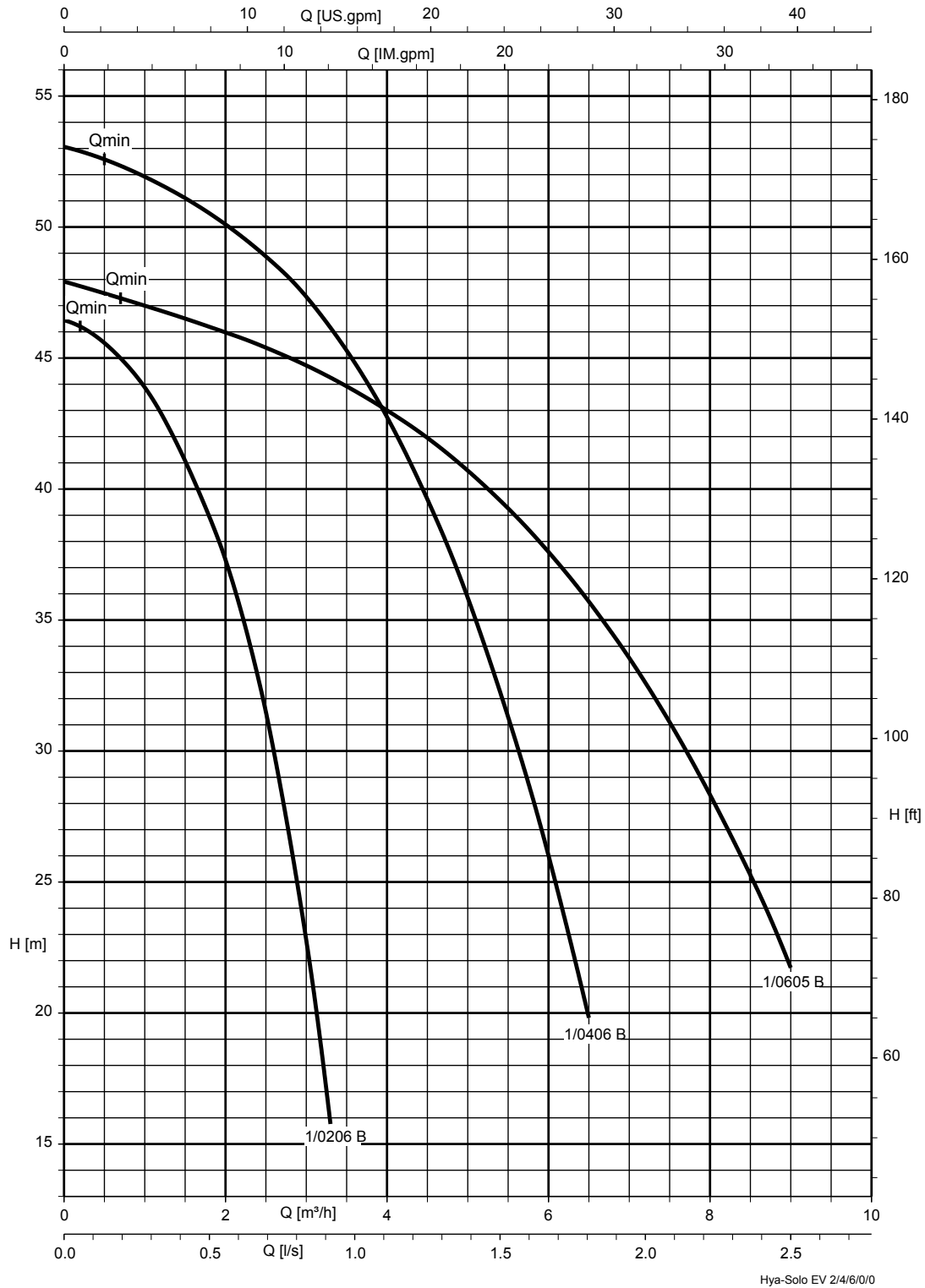
⇒ At an inlet pressure $p_{in} = 0$ bar: Hya-Solo EV 1/0406

Technical data

Selection table

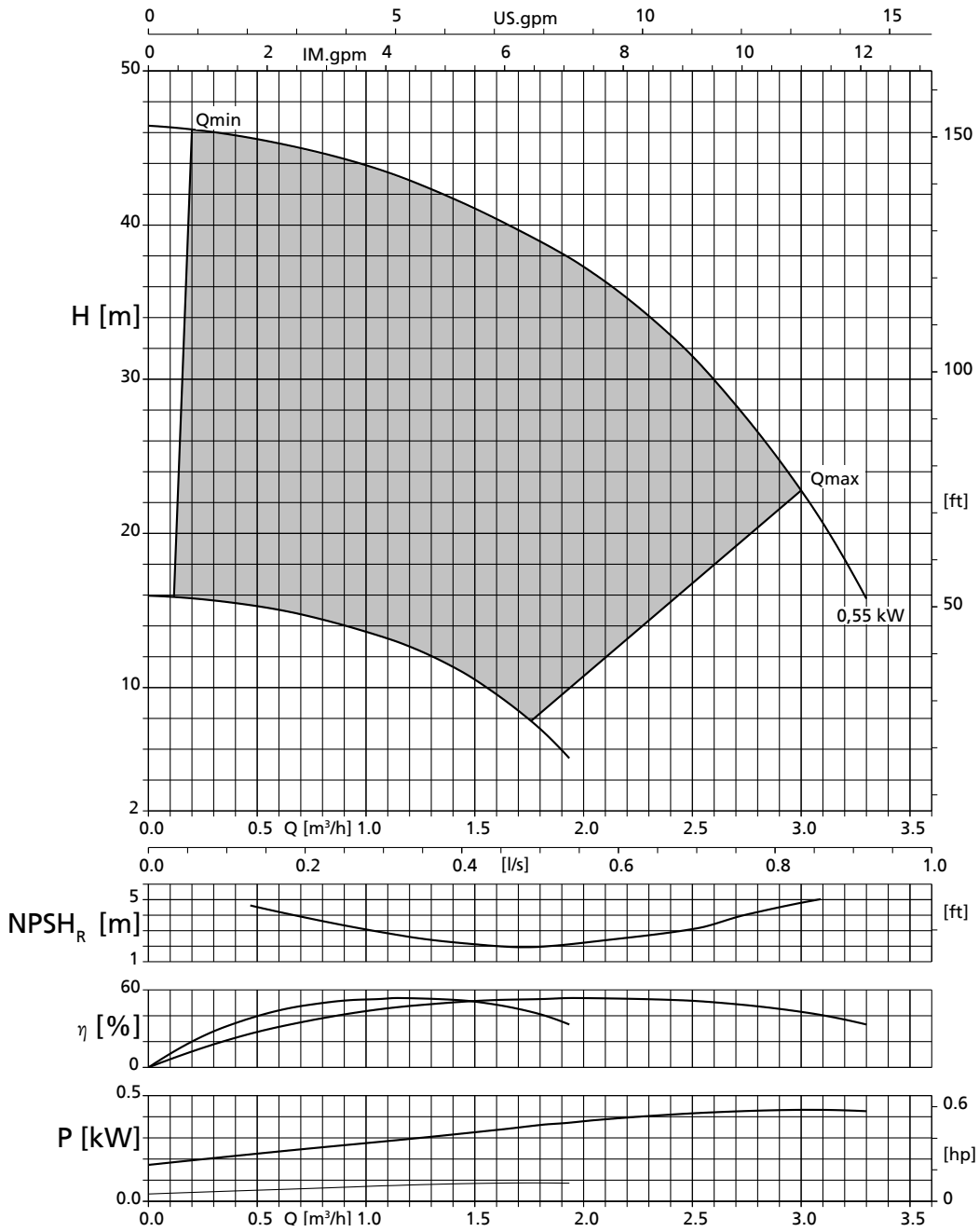
Size	Rated voltage	Rated power P_2	Rated current	Connection Suction side - Discharge side	Max. No. of start-ups	Mat. No.	[kg]
	[V]	[kW]	[A]		[per hour]		
1/0206 B	1~230	0,55	3,7	R 1 1/4 - R 1 1/4	20	48229201	30
1/0406 B	1~230	1,10	6,7	R 1 1/4 - R 1 1/4	20	48229202	34
1/0605 B	1~230	1,10	6,7	R 1 1/4 - R 1 1/4	20	48229203	38

Hya-Solo EV 1/0206 B, 1/0406 B, 1/0605 B

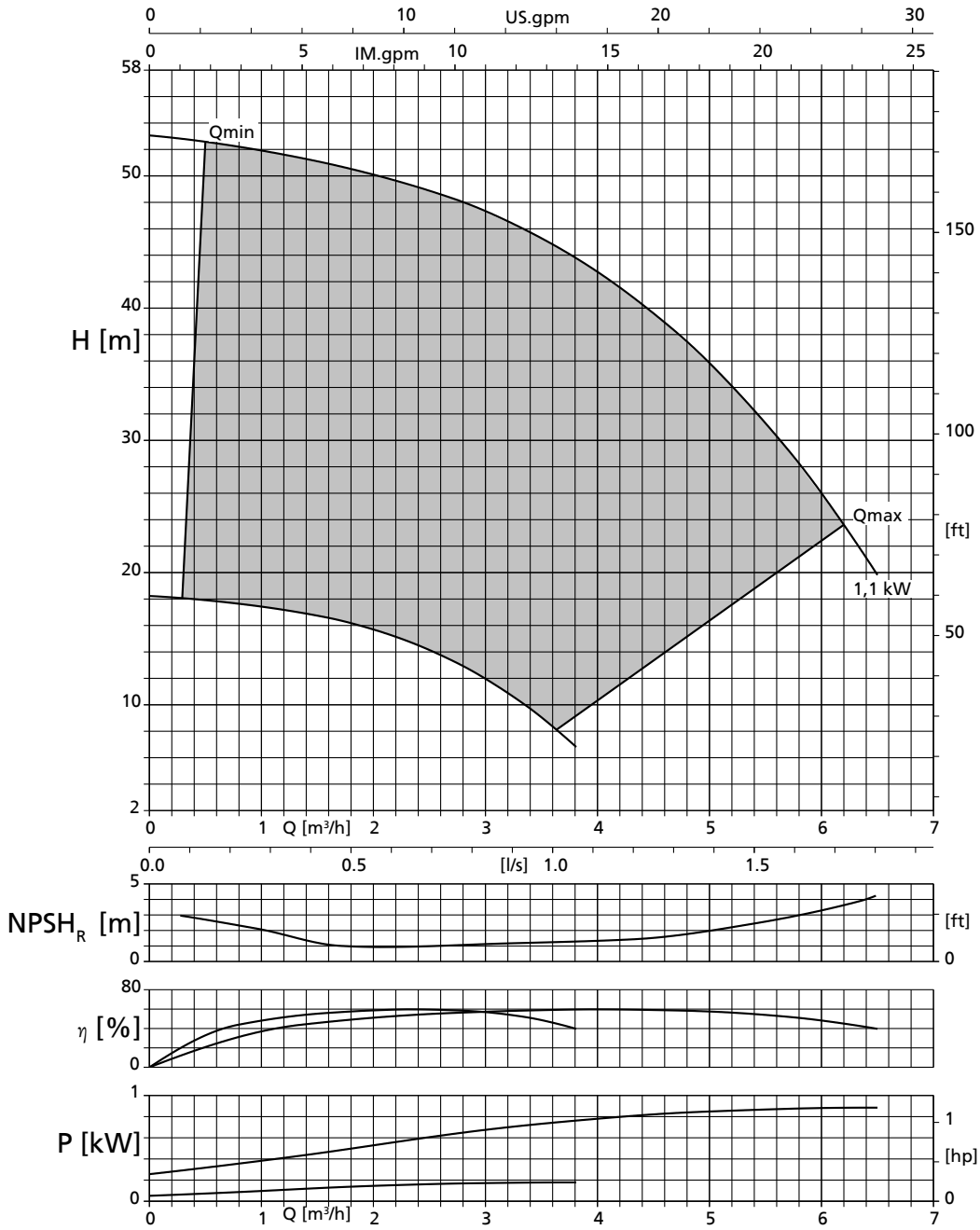


Characteristic curves

Hya-Solo EV 1/0206 B

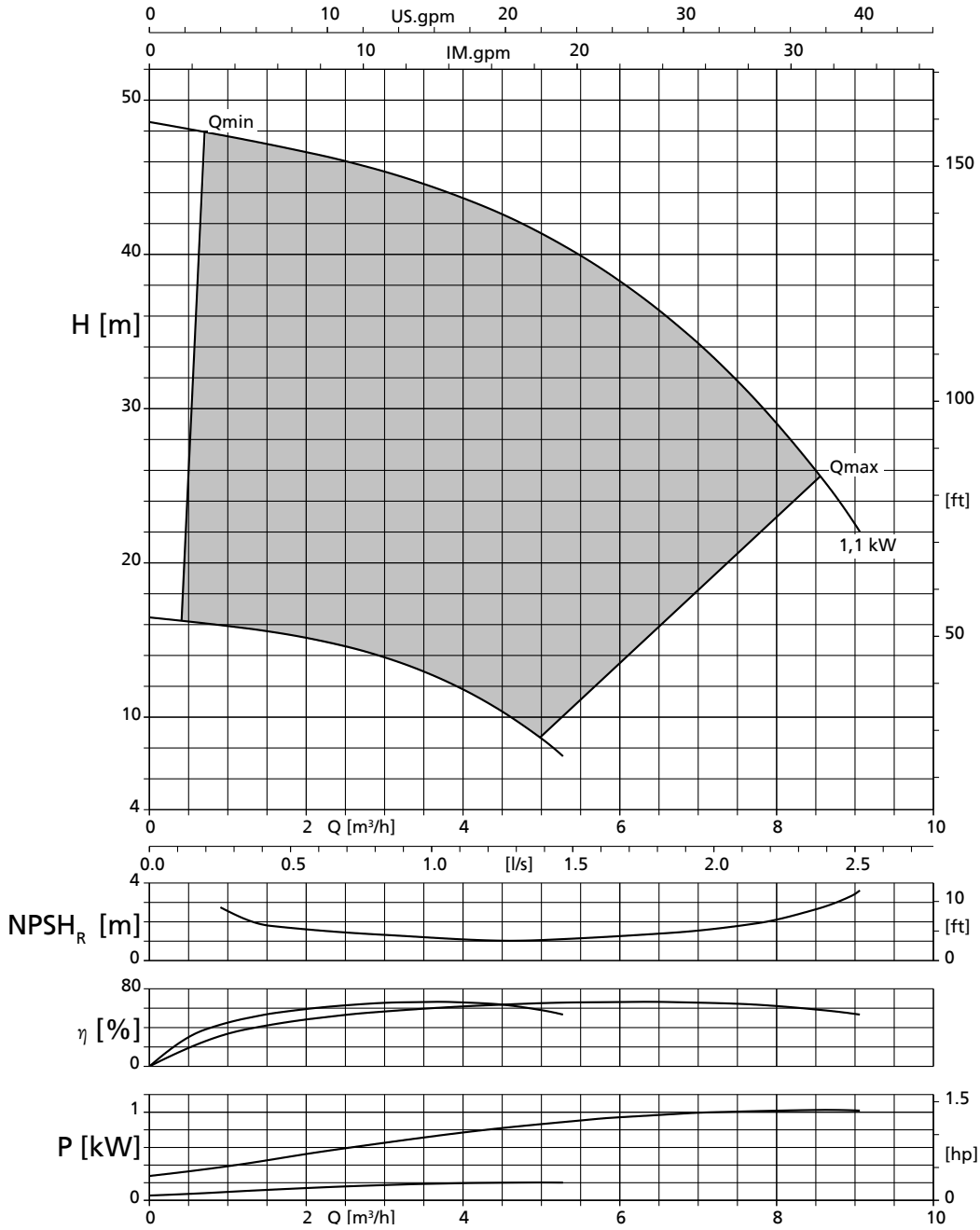


Hya-Solo EV 1/0406 B

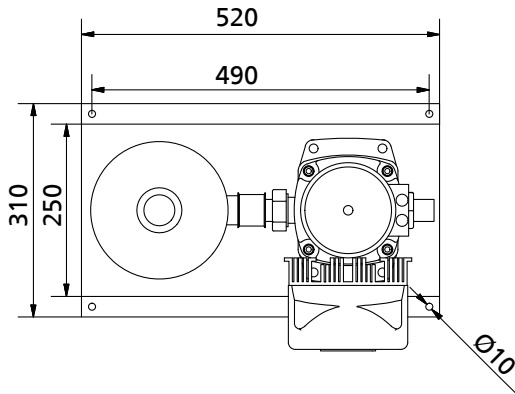
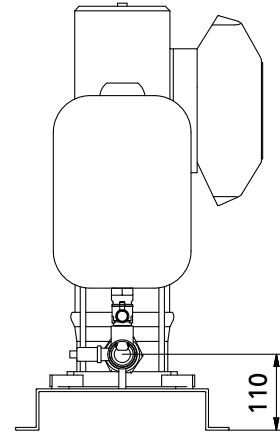
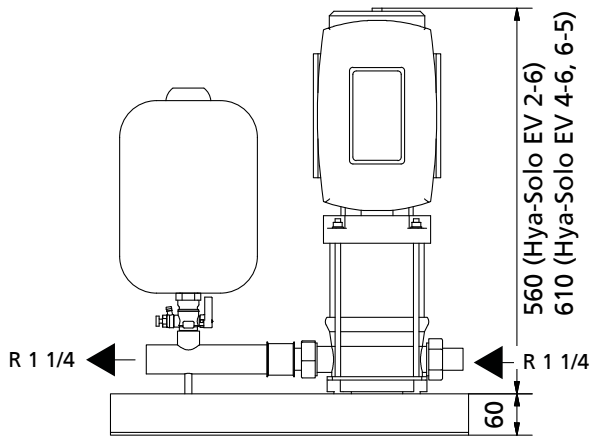




Hya-Solo EV 1/0605 B



Dimensions



Dimensions of Hya-Solo EV [mm]

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1951.53/03-EN



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