

**BEDU**  
≡ POMPEN ≡

# SELF-PRIMING SIDE CHANNEL PUMP

SEMA



made for your process



SEMA®

BEDU  
POMPEN

SERO  
PumpSystems



Self-priming Side Channel Pump SEMA®.

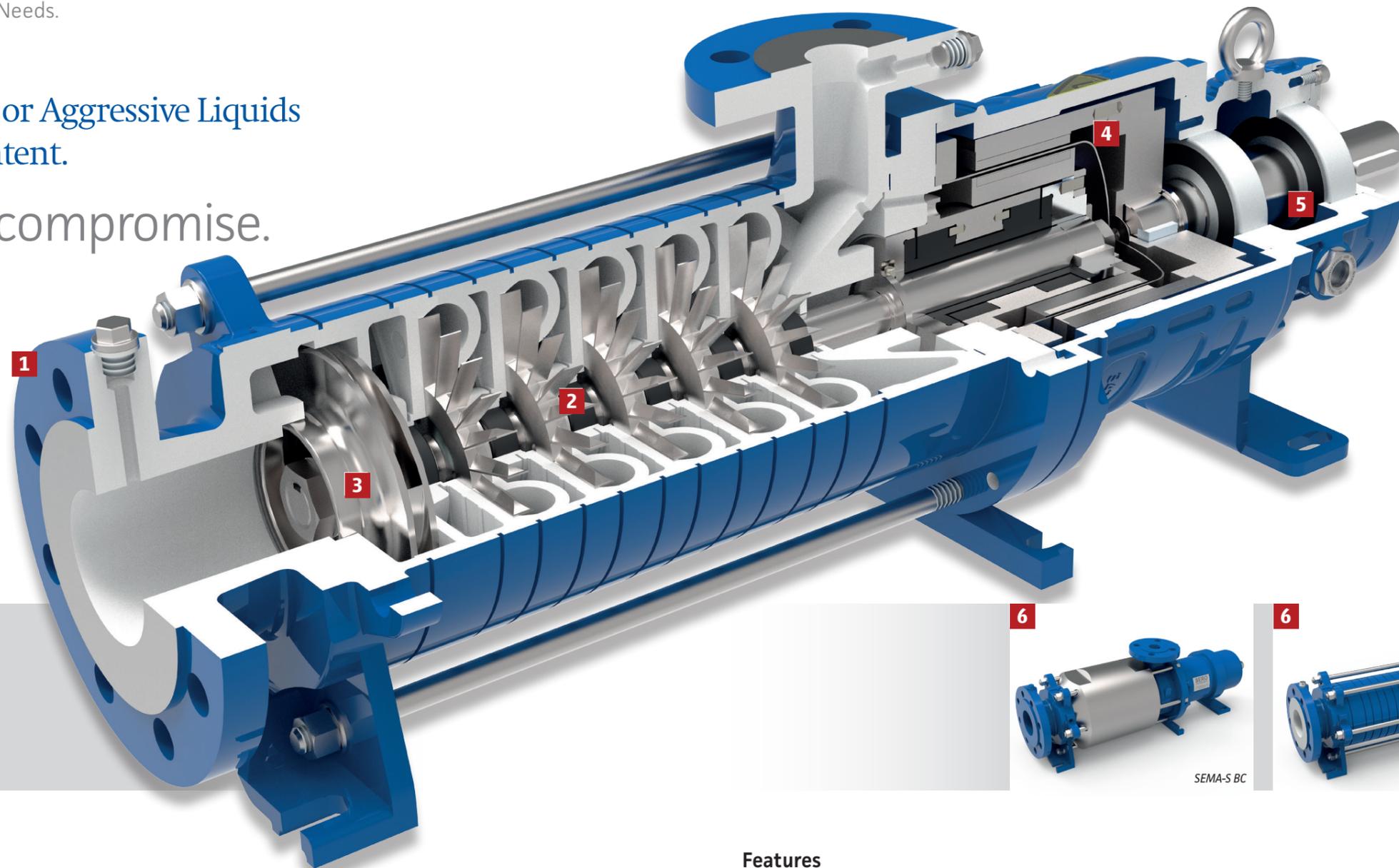
Sealless with  
Magnetic Drive.

- Gas Handling
- Low NPSH requirements (SEMA-S)
- Leak Proof
- Modular Design with many Standardized Parts

Save handling of Toxic or Aggressive Liquids  
also with High Gas Content.

SEMA® - No compromise.

SEMA®



**Construction**

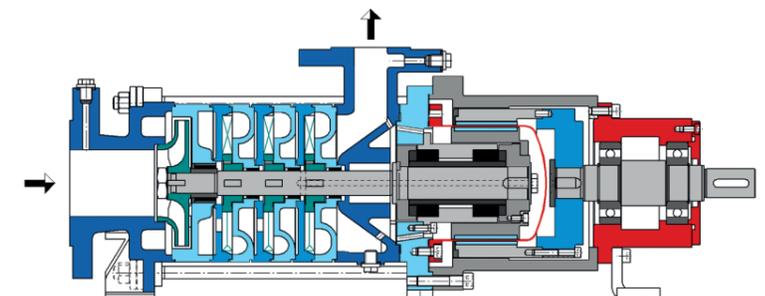
SEMA 110-660	
Nozzle position	suction: axial discharge: radial
Flanges	accord. EN 1092 PN 40 or ANSI 300 lbs as an option
Shaft seal	sealless due to magnetic coupling
Bearing	Combined medium lubricated axial-radial bearing in SiC or carbon and medium lubricated carbon bearings in every stage, plus two heavy atmospheric and maintenance-free single-row ball bearings greased for bearing lifetime.
Direction of rotation	counterclockwise (seen from drive-end) for SEMA-S and SEMA-L, clockwise for SEMA-Z

**Operating data**

SEMA 110-660		
Flow rates	up to 36 m³/h (1450 l/min)	up to 42 m³/h (1750 l/min)
Heads	up to 350 m (1450 l/min)	up to 550 m (1750 l/min)
Speed	900 - 1800 1/min	
Temperature	-60 °C up to +220 °C	
Nom. Pressure	max. 40 bar (depending on mech. seal)	
NPSH	starts at 0,35 m (SEMA-S)	starts at 1 m (SEMA-L/Z)

**Features**

- 1** Robust, compact castings in various designs.
- 2** Open star impellers with automatic hydraulic axial balance. Free of axial thrust.
- 3** SEMA-S with an additional NPSH-impeller guarantees extremely low NPSH values (axial inlet).
- 4** Permanent magnetic coupling with completely encapsulated inner rotor and oversized SiC drive-end sleeve bearing.
- 5** The heavy atmospheric ball bearings with lifetime grease-filling are maintenance-free. Oil lubrication as an option.
- 6** Specific models for special applications are available:
  - BC (Barrel casing for elevated environmental and operational safety)
  - B (Close-coupled block design for limited space and ideal alignment)
  - TT (Low temperature option for media down to -60° C)
  - K (High temperature option for media up to +220° C)

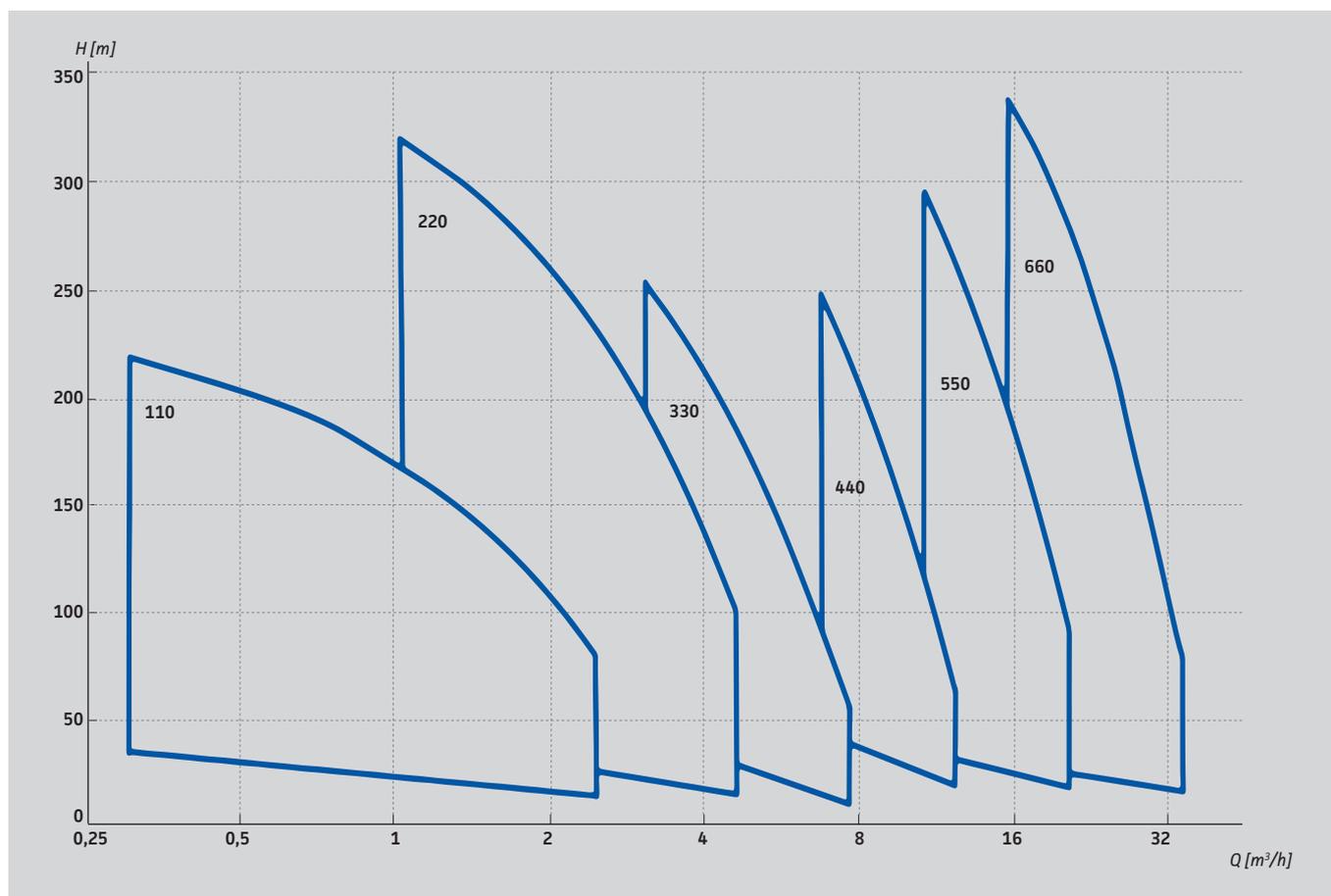


## Material specification

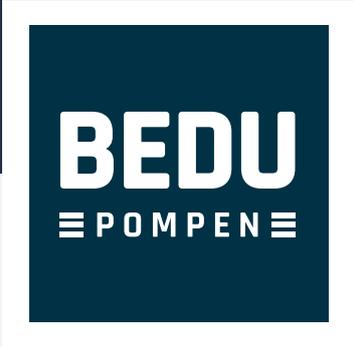
	cast iron (12)	ductile iron (62)	stainless steel (32)
Casings	GJS 400-18	GJS 400-18	1.4408
Inner stage casings	GJL 200	GJS 400-15	1.4470
Shaft	1.4021	1.4021	1.4571
Impeller	1.4059	1.4059	1.4581
Bearing bushing	Carbon	Carbon	Carbon
Sleeve bearing (mag drive)	S2 (SiC-SiC)   S4 (SiC-Carbon)		
Split can	1.4571 [stainless steel]   2.4610 [Hastelloy C4]   CFK [carbon fiber reinforced plastic]		
Flange (split can)	1.4571 [stainless steel]   2.4610 [Hastelloy C4]   1.4462 [duplex steel]		

[Subject to modifications]

## Performance range 1450 min-1







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## made for your process

- Expert advice
- A customer-oriented organization that adapts to the requirements and wishes of your organization
- Innovative and customized solutions
- Breakdownservice, 24 hours a day, 7 days a week
- Technical service with extensive test facilities, working from our own workplace or at your location
- A fast and appropriate solution for all your issues
- Wide range of liquid pumps
- Repair, maintenance and revision

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