

# Magnet drive gear pumps MK200/MK300 series

The MK200 and MK300 series pumps are designed to complete the existing MG series with improved performances in terms of capability to handle high viscosity fluids and a wider offer of materials to suit most applications, from the food to the industrial and chemical markets. The pump's housing and the internal metal parts are available in AISI 303, AISI 316L or SAF 2205.

The gears are available in Peek™, Ceramic Peek™ or PTFE™.

The driving magnet and the quality of the materials of the assembled components allows handling of fluids with temperatures up to 120 °C (248 F).

The low noise and pulsation is the result of precision gears accurately assembled and balanced within the housing combined with the magnetic coupling which grants the perfect alignment.

The Sanitary design makes this pump series the preferred candidate for use in medical applications where trouble-free products are needed.

It is also available a special version designed for system pressure up to 35 bar (507 psi).

Available upon request:

- Built-in relief valve (MK200 series only)



## MAIN APPLICATIONS

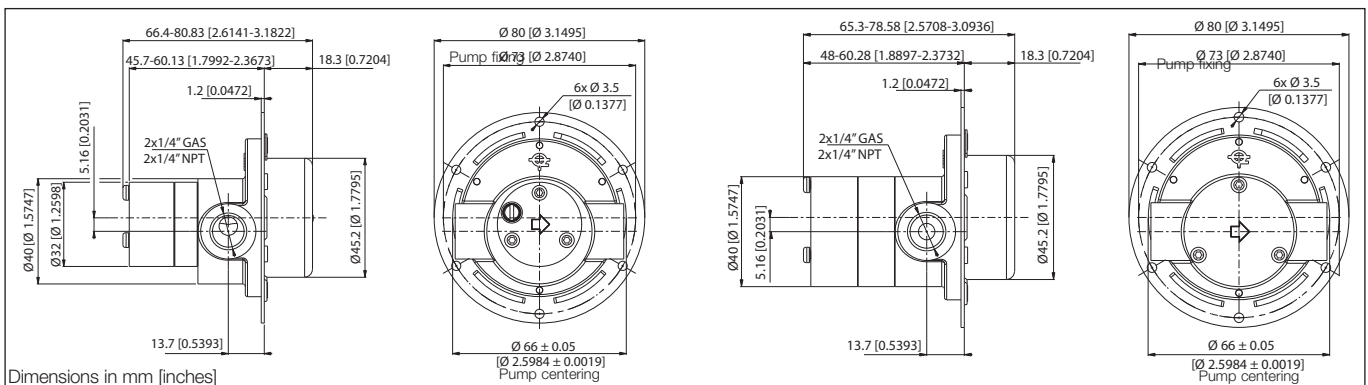
- Medical and surgical equipment
- Hemodialysis apparatus
- Laser apparatus
- Lubrication
- Ink-Jet printing systems
- Cooling systems
- Laboratory instrumentation
- Water treatment
- Sampling
- Food processing equipment

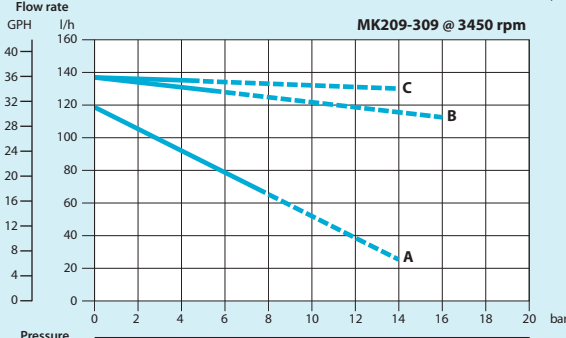
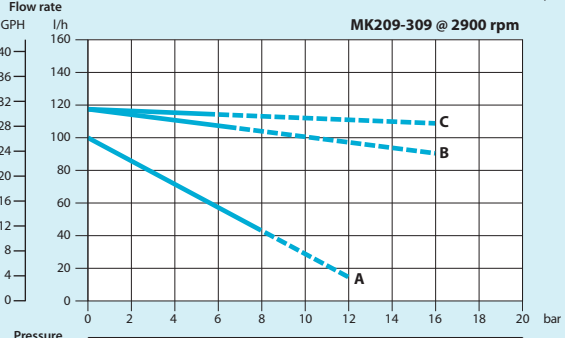
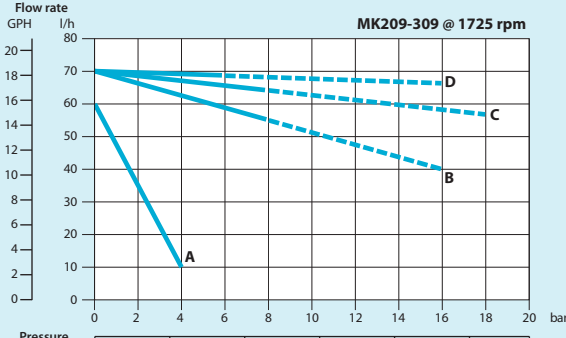
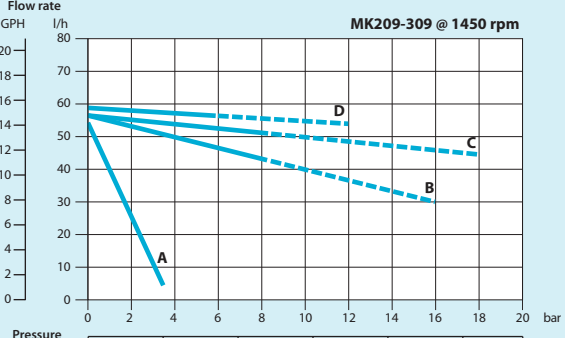


## TECHNICAL INFORMATION

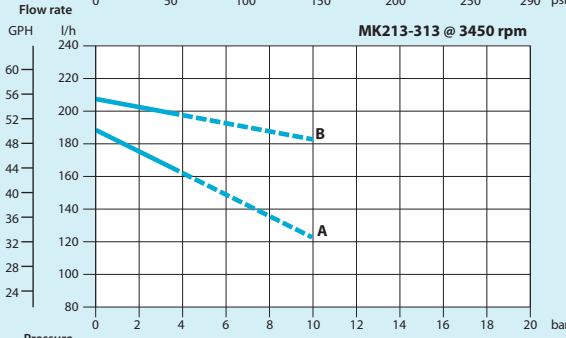
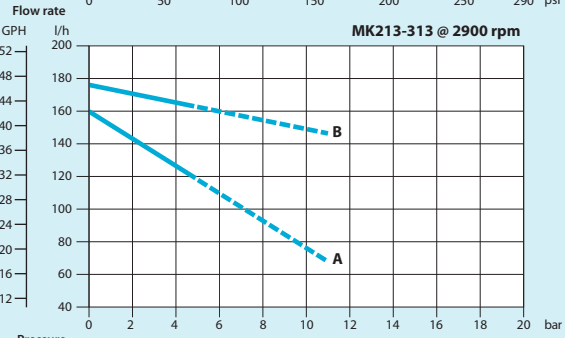
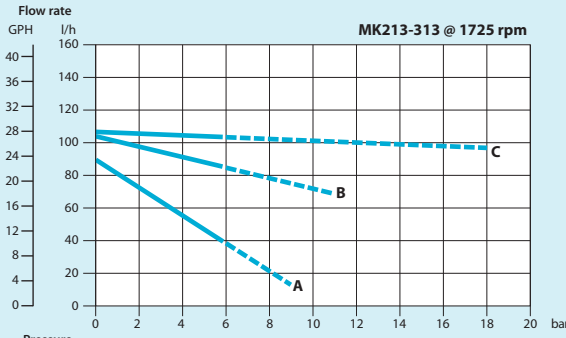
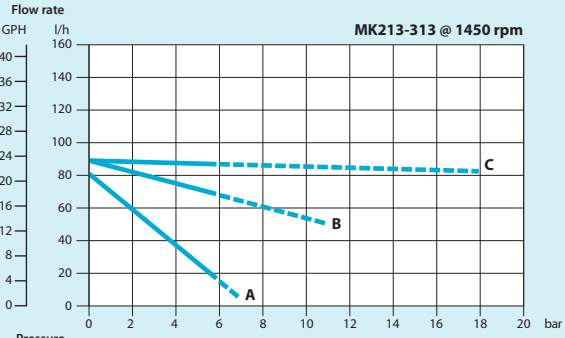
Pump housing material	Stainless steel	Max static pressure	20 bar/290 psi
Gears and bushing materials	Peek™/Ceramic Peek™/PTFE™	Temperature range	Peek™ -45 to 120 °C/-49 to 248 F
Ports	1/4" GAS or NPT	Temperature range	Ceramic Peek™ -45 to 120 °C/-49 to 248 F
Pump weight (MK313)	700 g (1.5 lb)	Temperature range	PTFE™ -45 to 50 °C/-49 to 122 F
Speed limit	5000 rpm	Max vacuum	724 mmHg/28.5 inHg
*Wet lift with water	~ 8m/26.7 ft		

\*Priming ability varies with operating conditions and fluid characteristics

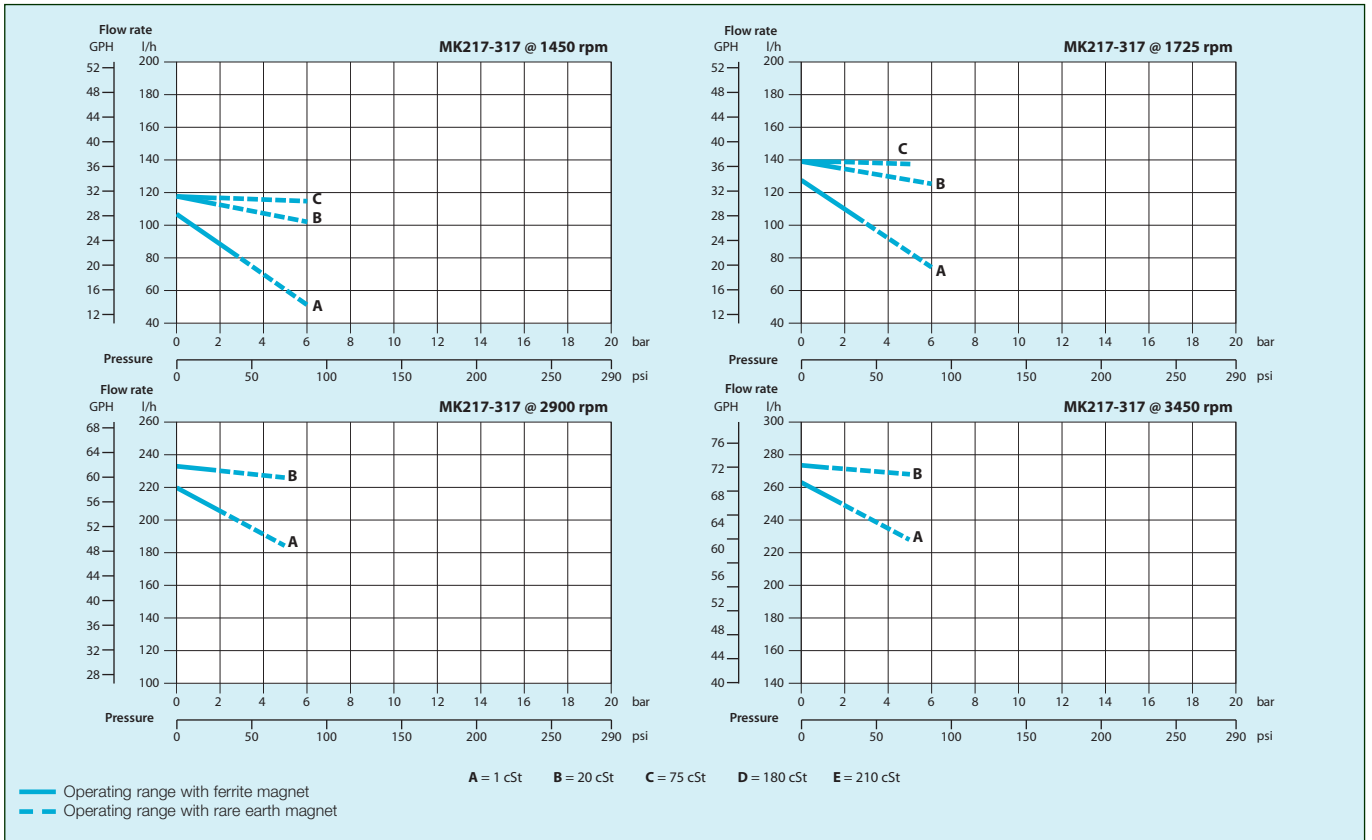




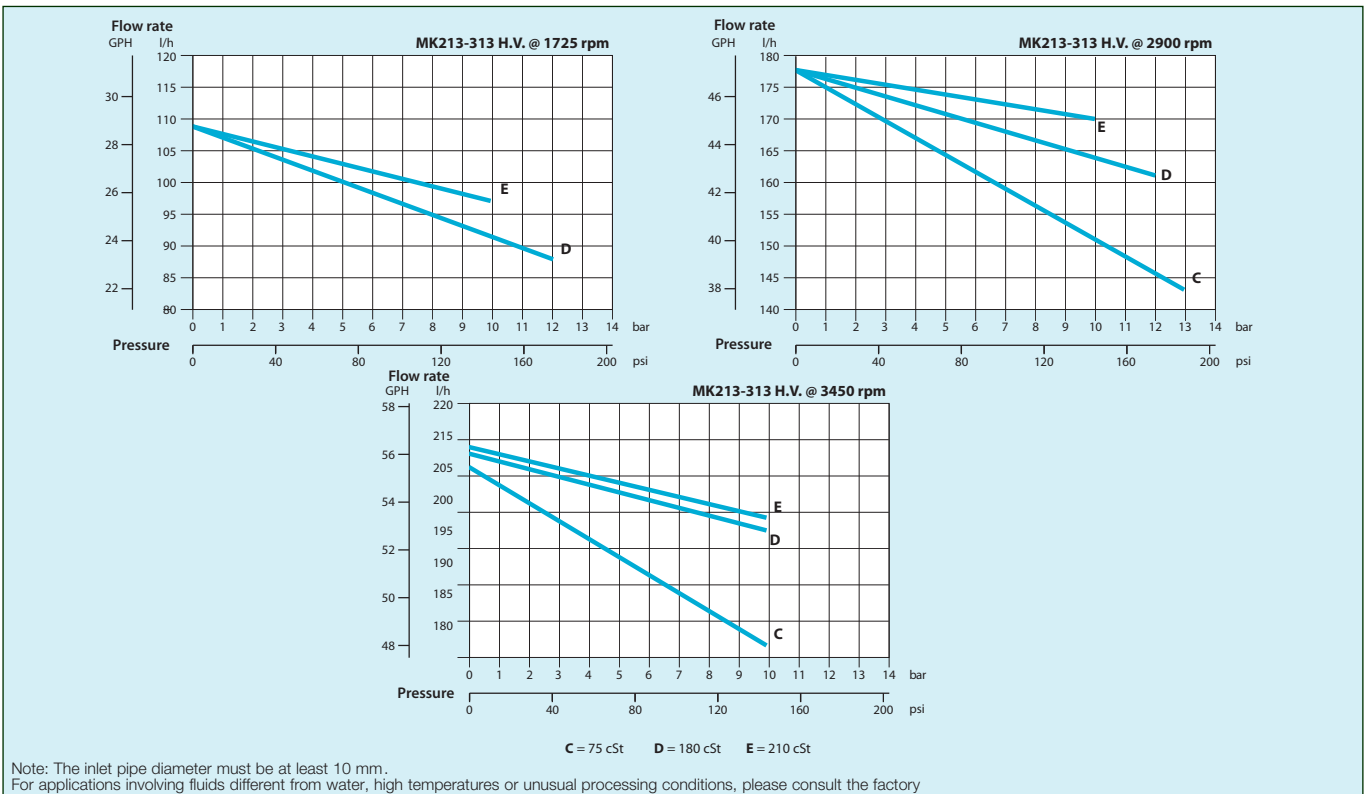
— Operating range with ferrite magnet      A = 1 cSt    B = 20 cSt    C = 75 cSt    D = 180 cSt    E = 210 cSt  
- - - Operating range with rare earth magnet



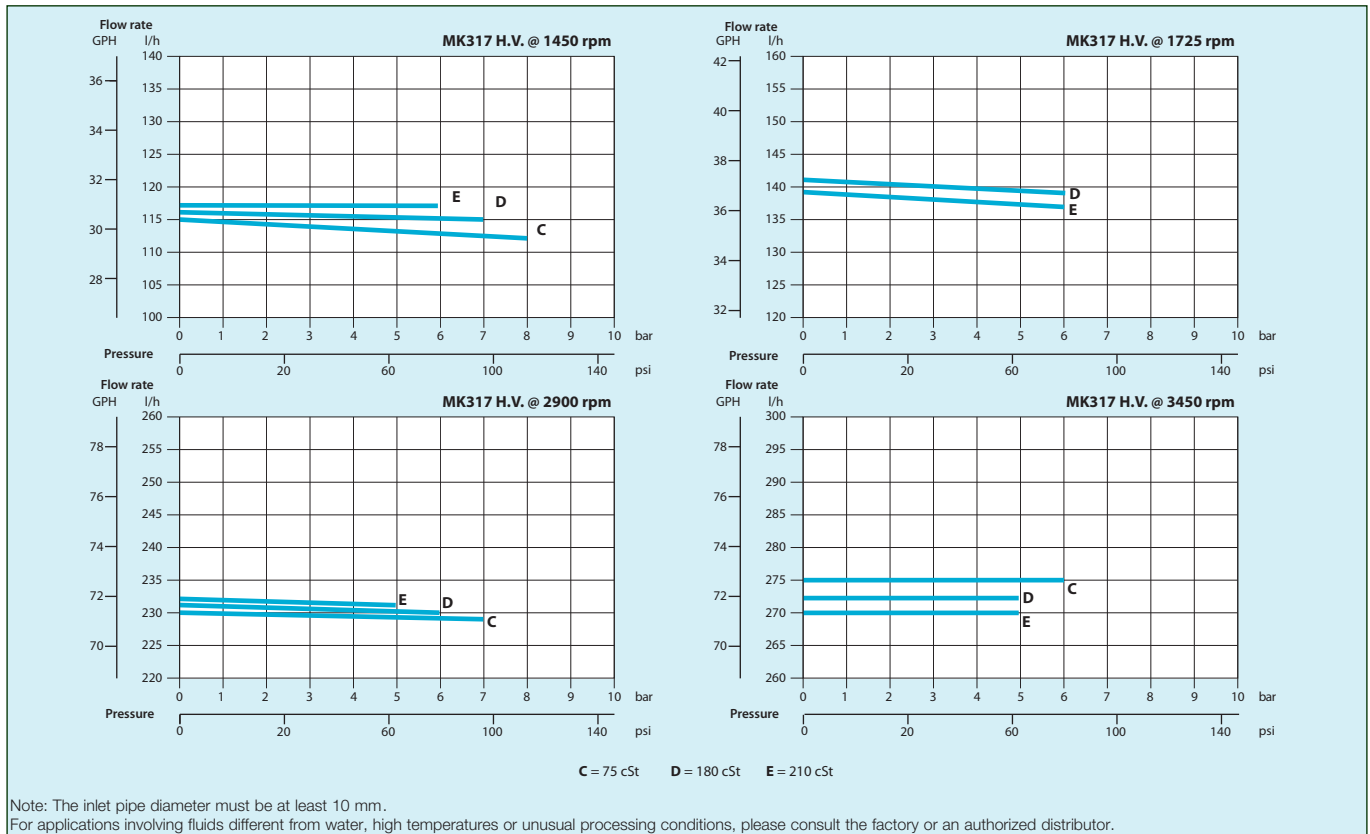
A = 1 cSt    B = 20 cSt    C = 75 cSt    D = 180 cSt    E = 210 cSt



**MK213/313 H.V.**



# MK217/317 H.V.



## MODEL NUMBER MATRIX

<b>Position</b>	1	2	3	4	5	6	7	8	Customization
<b>Code</b>	<b>MK</b>	<b>3</b>	<b>13</b>	<b>X</b>	<b>E</b>	<b>0</b>	<b>P</b>	<b>N</b>	<b>00000</b>

POS	DESCRIPTION	CODE	POS	DESCRIPTION	CODE
1	Driven magnet	<b>MK</b> = ferrite	5	Type of connections	<b>E</b> = 1/4" GAS <b>F</b> = 1/4" NPT
2	Pump series	<b>2</b> = PTFE™ flat seal <b>3</b> = with o-ring	6	Relief valve	<b>0</b> = without <b>1</b> = with
3	Gear width in mm (Nominal displacement)	<b>09</b> = 9 mm (0.6 ml/rev)	7	Gear material	<b>P</b> = Peek™ <b>T</b> = PTFE™
		<b>13</b> = 13 mm (0.9 ml/rev)			<b>G</b> = Ceramic Peek™
4	Housing material	<b>17</b> = 17 mm (1.2 ml/rev)	8	Static seal material	<b>T</b> = PTFE™ <b>E</b> = EPDM
		<b>X</b> = AISI 316L <b>S</b> = SAF 2205			<b>N</b> = NBR <b>S</b> = Silicon
		<b>Y</b> = AISI 303			<b>V</b> = Viton®

Fluid-o-Tech reserves the right to alter the specifications indicated in this catalogue at any time and without prior notice.

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