



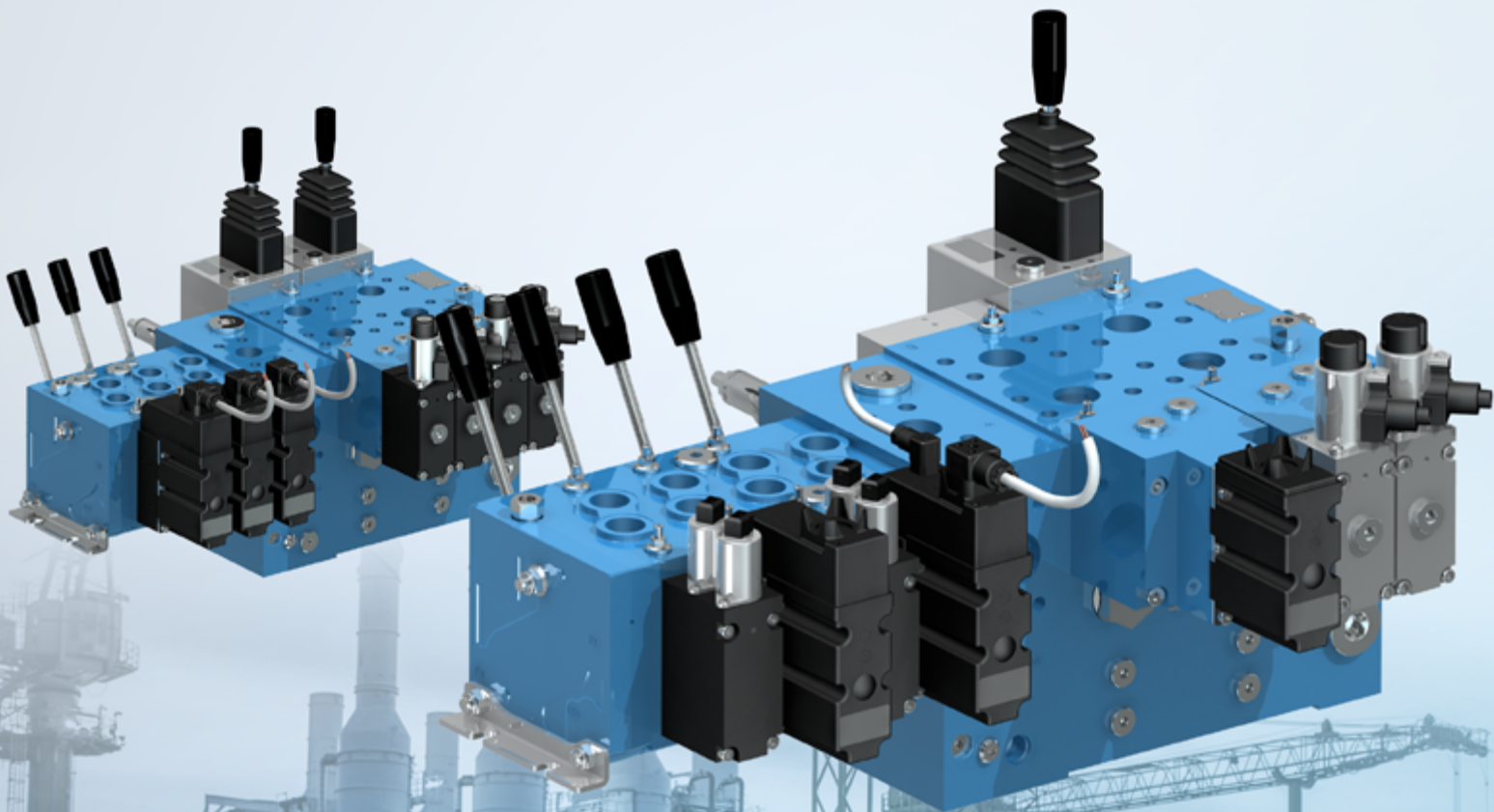
**BREVINI®**

Motion Systems

# HPV310

## Proportional Directional Valve

Flow rate up to 600 l/min, Pressure up to 370 bar



*Optimized performances and integration of the greatest number of functions are the objectives planned and achieved through the development of the HPV valves, a range of the latest generation of proportional directional valves that perform two simultaneous functions: directional control and flow control that is unaffected by load variations.*

# HPV310

## Proportional Directional Valve

Main features:

- **Load-independent** flow control
  - > The flow of an individual function is independent of the load pressure of this function
  - > The flow of each function is independent of the load pressure of other functions
- Easy **integration** with HPV41 and HPV77 proportional directional valves in range
- **Compact** and **flexible** design
- Excellent **flow control** and **low hysteresis**
- **Energy-saving**
- **Open** and **closed** loop control. Open loop control also available according to **ATEX** directive

Technical data			HPV310 (HPV77)
Max rated flow	HSE inlet section, P port		600 l/min [159 US gal/min]
	Mid inlet section, HFLS A/B port		550 l/min (190 l/min) [145 US gal/min (55 US gal/min)]
Max. rated pressure	P port	Pressure relief valve setting	400 bar [5800 psi]
		Working pressure	370 bar [5370 psi]
	T port	A/B port	370 bar (370 bar) [5370 psi (5370 psi)]
		Y port to tank	to tank
Static/Dynamic		25/35 bar [363/568 psi]	
Max. pilot pressure oil supply			up to 30 bar [428 psi]
Oil temperature	Recommended		-30 ÷ 60 °C [-22 ÷ 140 °F]
	Min.		-25 °C [-13 °F]
	Max.		+80 °C [+176 °F]
Ambient temperature			-30 ÷ 60 °C [-22 ÷ 140 °F]
Viscosity	Recommended		12 ÷ 80 mm <sup>2</sup> /s [65 ÷ 366 SUS]
	Min.		4 mm <sup>2</sup> /s [39 SUS]
	Max.		460 mm <sup>2</sup> /s [2090 SUS]
Filtering			class 9 according to NAS 1638 (20/18/15 according to ISO 4406)
Stroke	Spool stroke		± 9 mm [± 0.354 in]
	Proportional		± 7.5 mm [± 0.295 in]
Dead band			± 1.5 mm [± 0.059 in]
Nominal internal leakage	A/B T	Without anti-shock valves	98 cm <sup>3</sup> /min
		With anti-shock valves	115 cm <sup>3</sup> /min

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**Application Policy**

Capacity ratings, features, and specifications vary depending upon the model and type of service. Application approvals must be obtained from Dana; contact your representative for application approval. We reserve the right to change or modify our product specifications, configurations, or dimensions at any time without notice.