PROPORTIONAL PRESSURE SUPPORT

What is it?
Proportional Pressure Support (PPS) is a partial ventilator support that overcomes patient respiratory system elastance (Ers) and resistance (Rrs) by applying pressure proportionally to volume (volume assist, VA) and flow (flow assist, FA) respectively.

FlowAssist
Compensates for work of breathing related to resistance which is proportional to flow
• Support is proportional to flow

VolAssist
Compensates for work of breathing related to elastance which is proportional to volume
• Support is proportional to volume

When should PPS be applied?
• Patient with spontaneous breathing
• Patient is accessible and cooperative
• Apnea ventilation is activated and adapted to the patient
• In the context of pathologically altered lung mechanics to reduce the work of breathing

Why is it helpful to improve the outcome?
• Patient is in control of all aspect of breathing (it feels more physiological)
• Improves patient-ventilator interaction
• Less sedation and more patient comfort during spontaneous breathing

Source: Dräger D-19684-2018