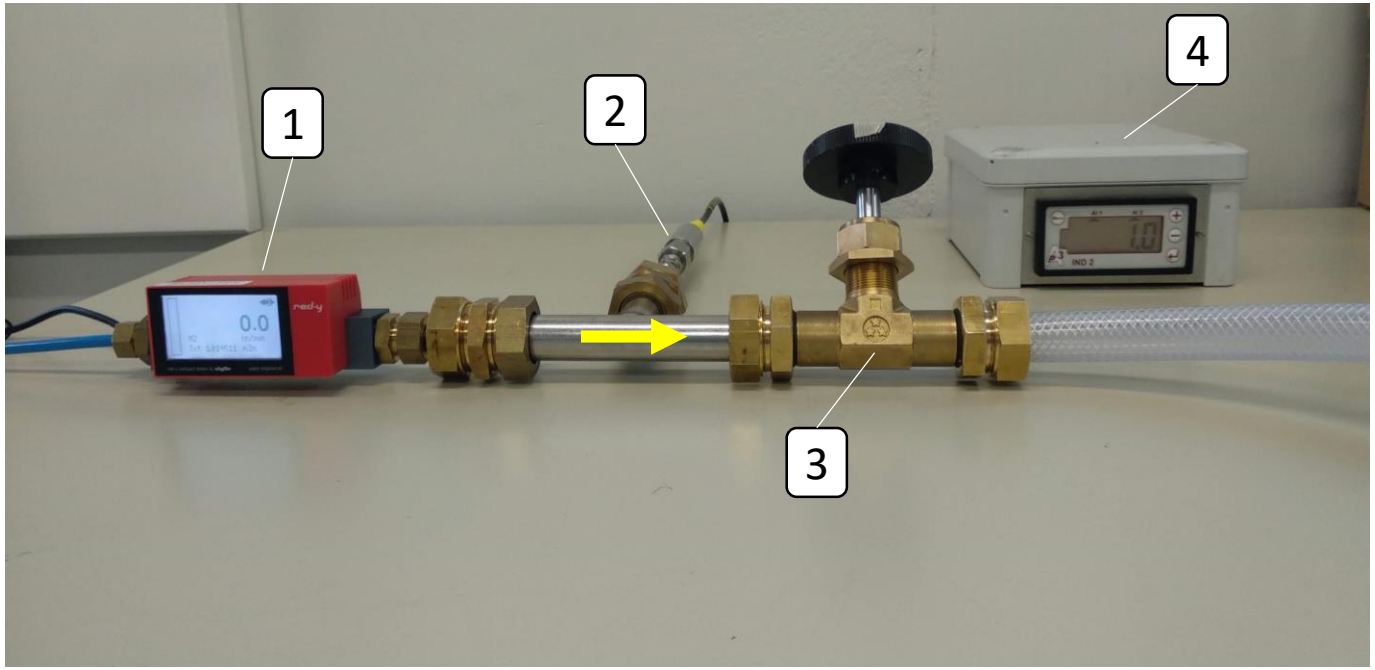
Regulation Valve Test Summary

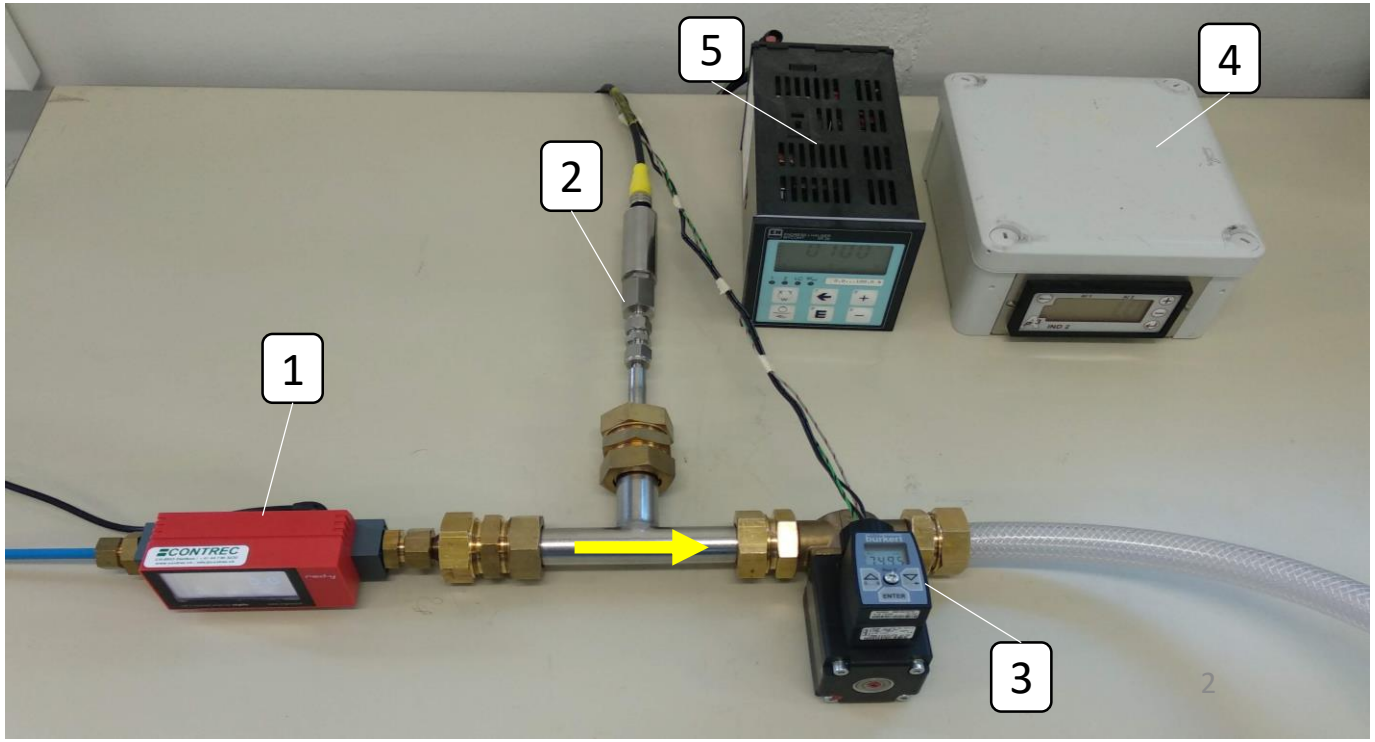
Sabino Zagaria

EP-DT-FS

Test Setup

1. Flowmeter
2. Pressure sensor
3. Tested Valve
4. Pressure reading
5. Controller

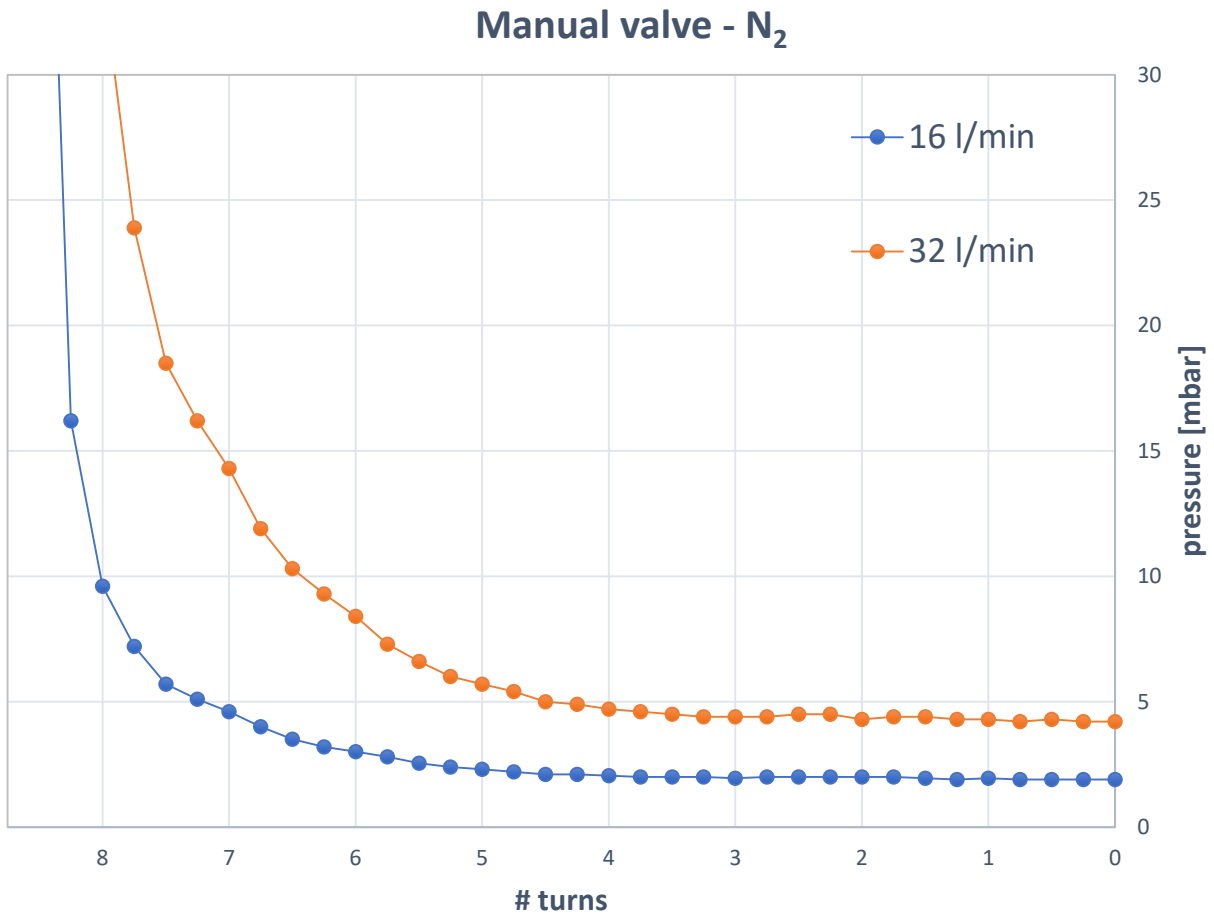


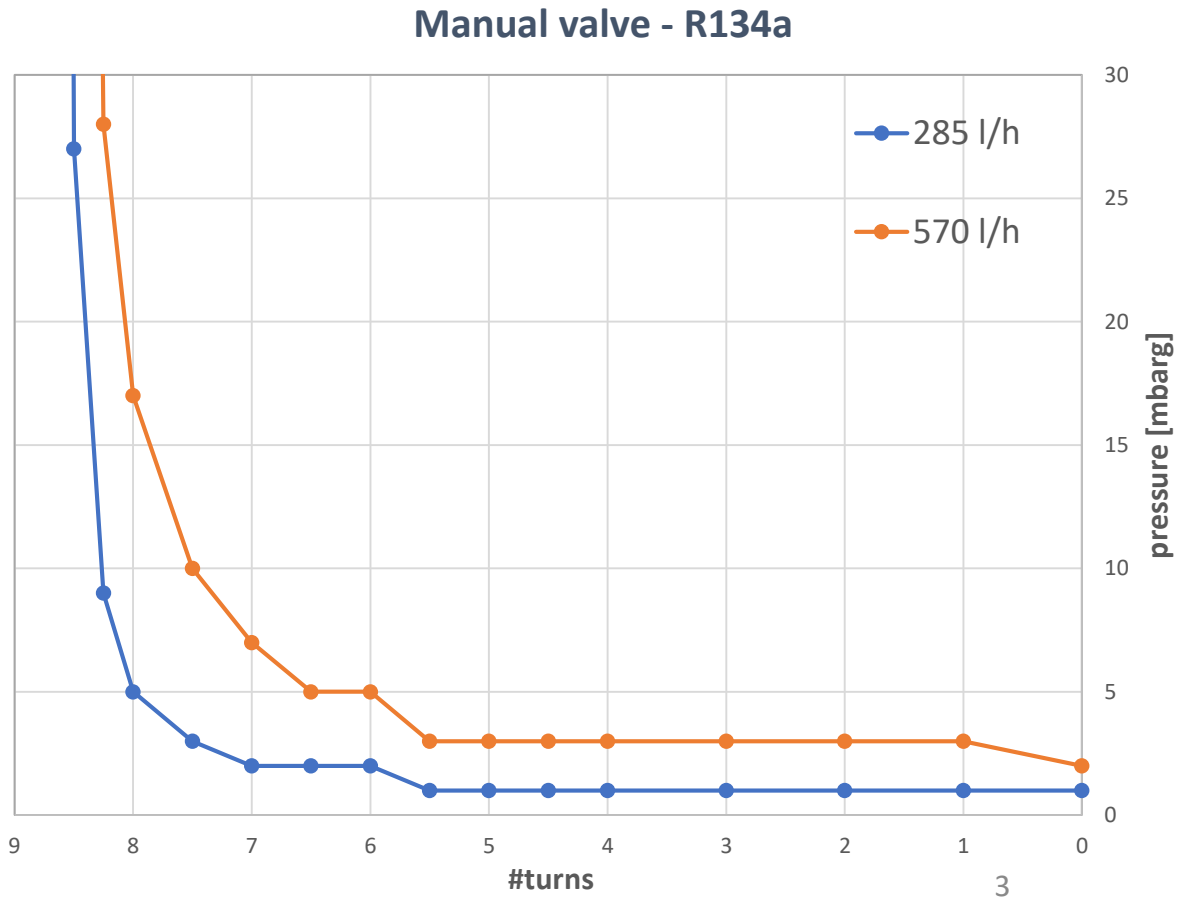


Manual Valve



Rotarex: vanne à chapeau union pour service dur (série 70) - raccord double bagues 1/2" - Version en ligne. Cost ~ 100 CHF





Burkert 8mm



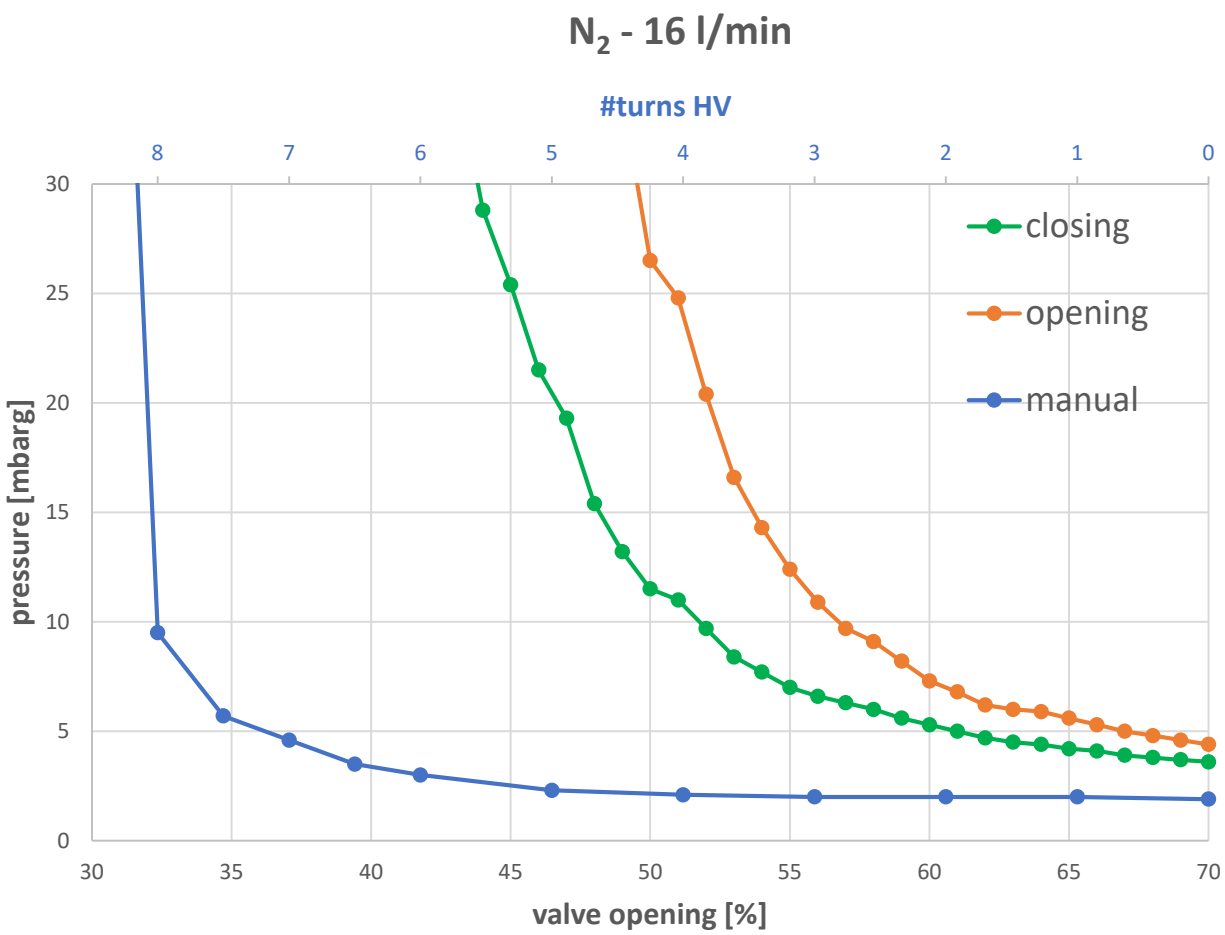
EDH: [7345892]

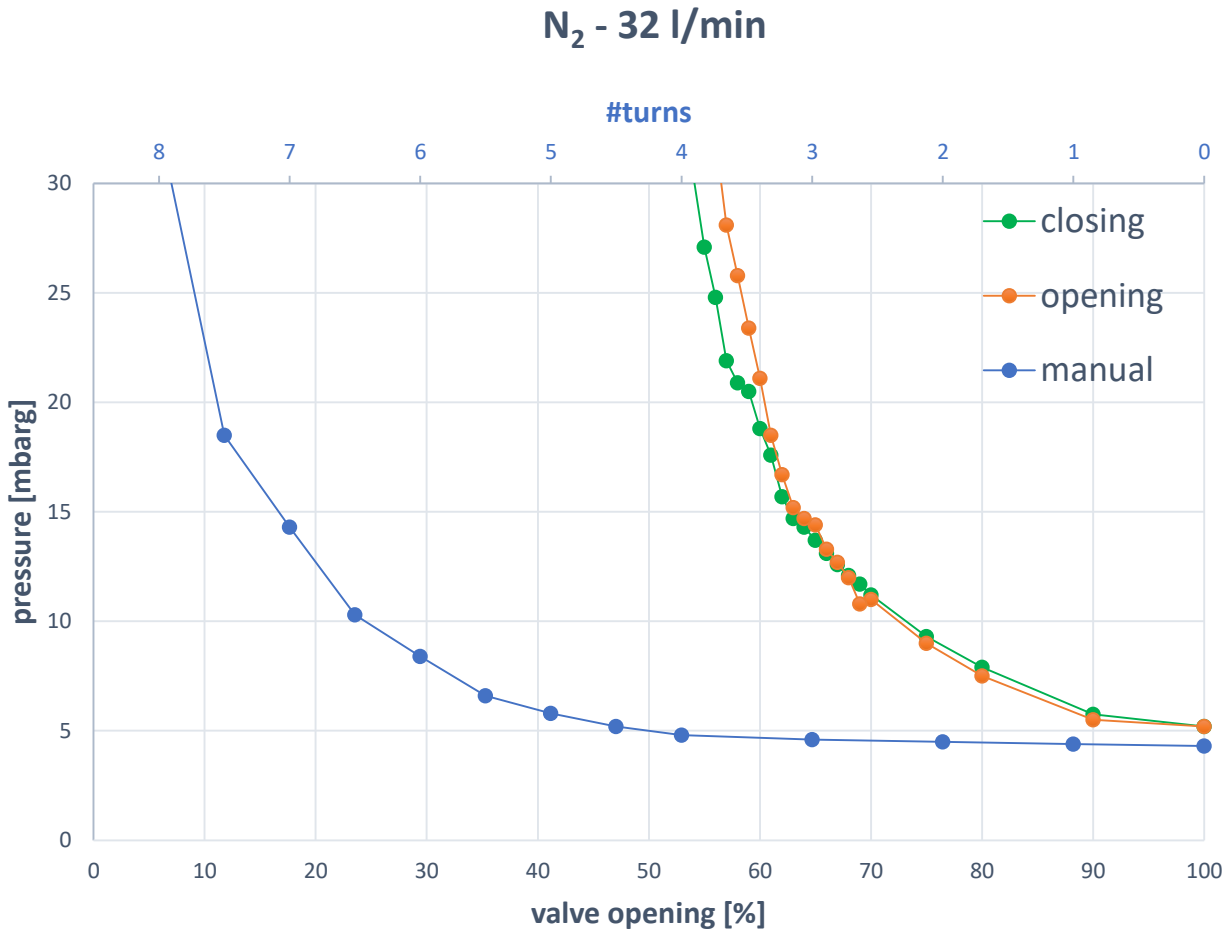
2/2 way, N.C., 24 VDC, 16W

Connection G 1/2"

$K_v = 1{,}4\ \frac{m^3}{h}$.

Cost ~ 420 CHF



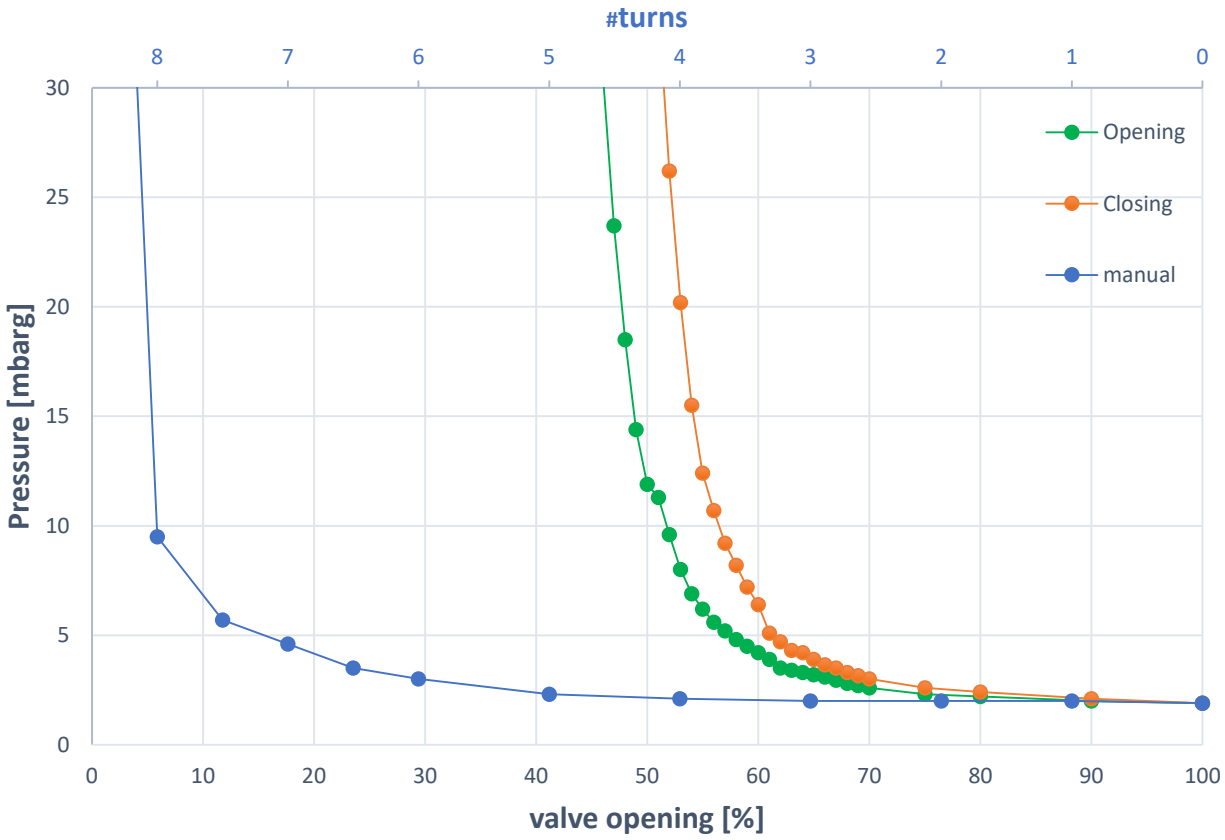


Burkert 9,5mm

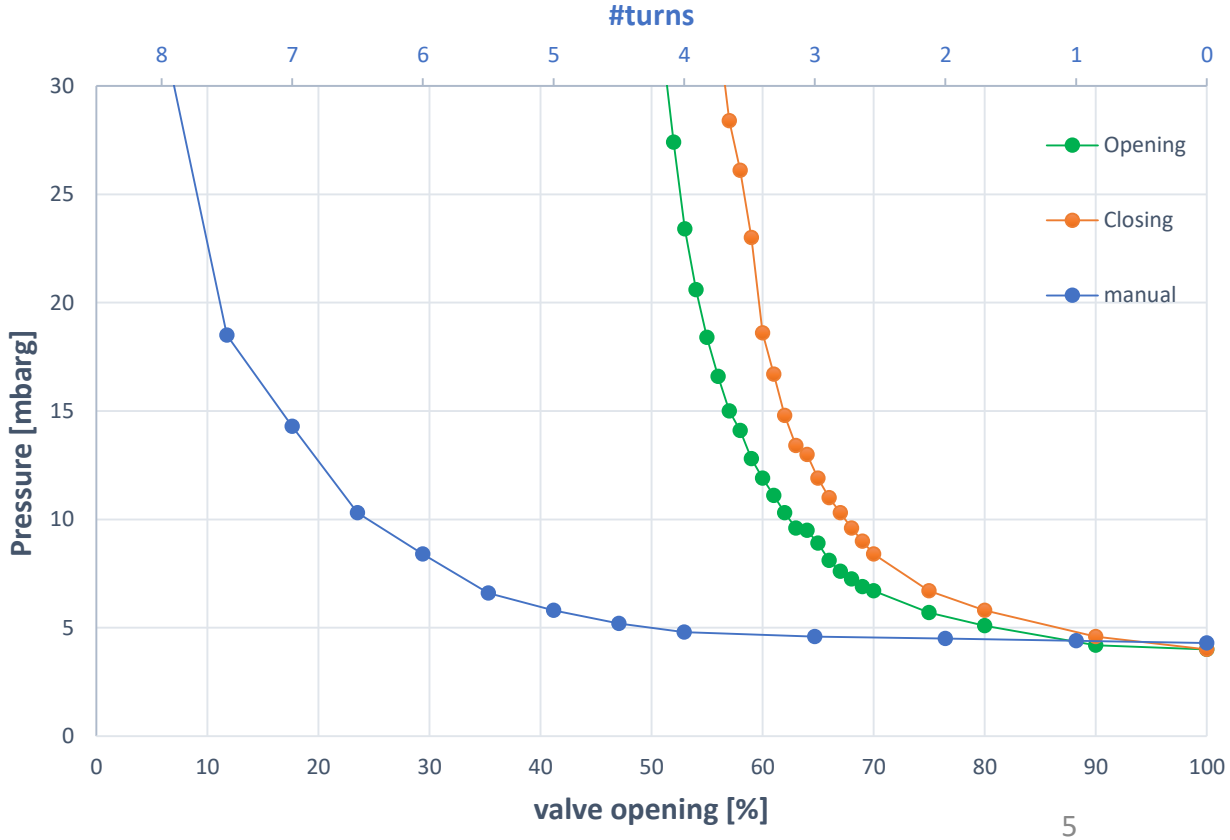


EDH: 7345892
2/2 way, N.C., 24 VDC, 16W
Connection G 1/2"
$K_v = 1{,}4\ \frac{m^3}{h}$; $\Delta p_{max} = 0{,}35\ bar$
Cost ~ 340 CHF

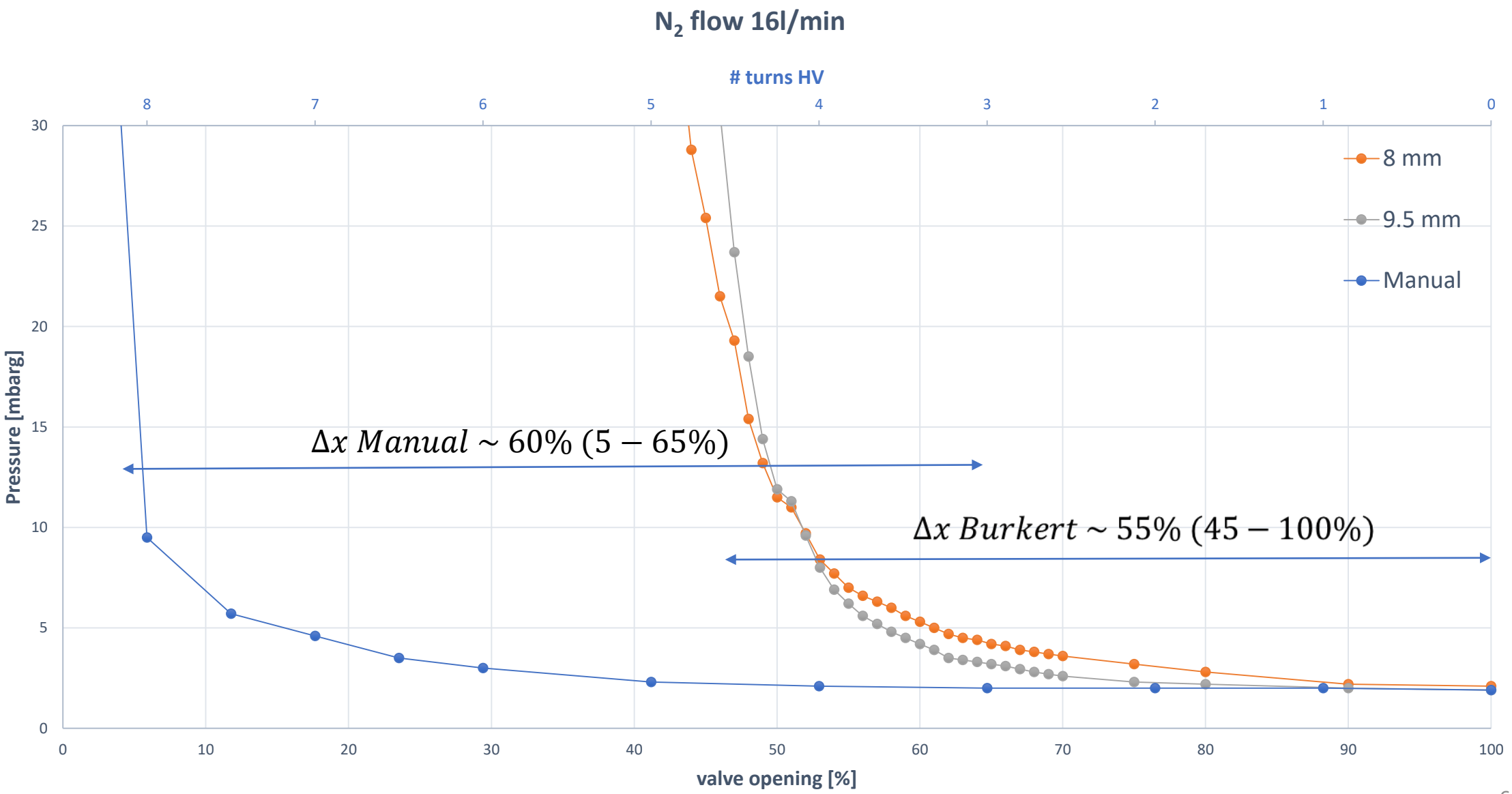
N_2 - 16 l/min



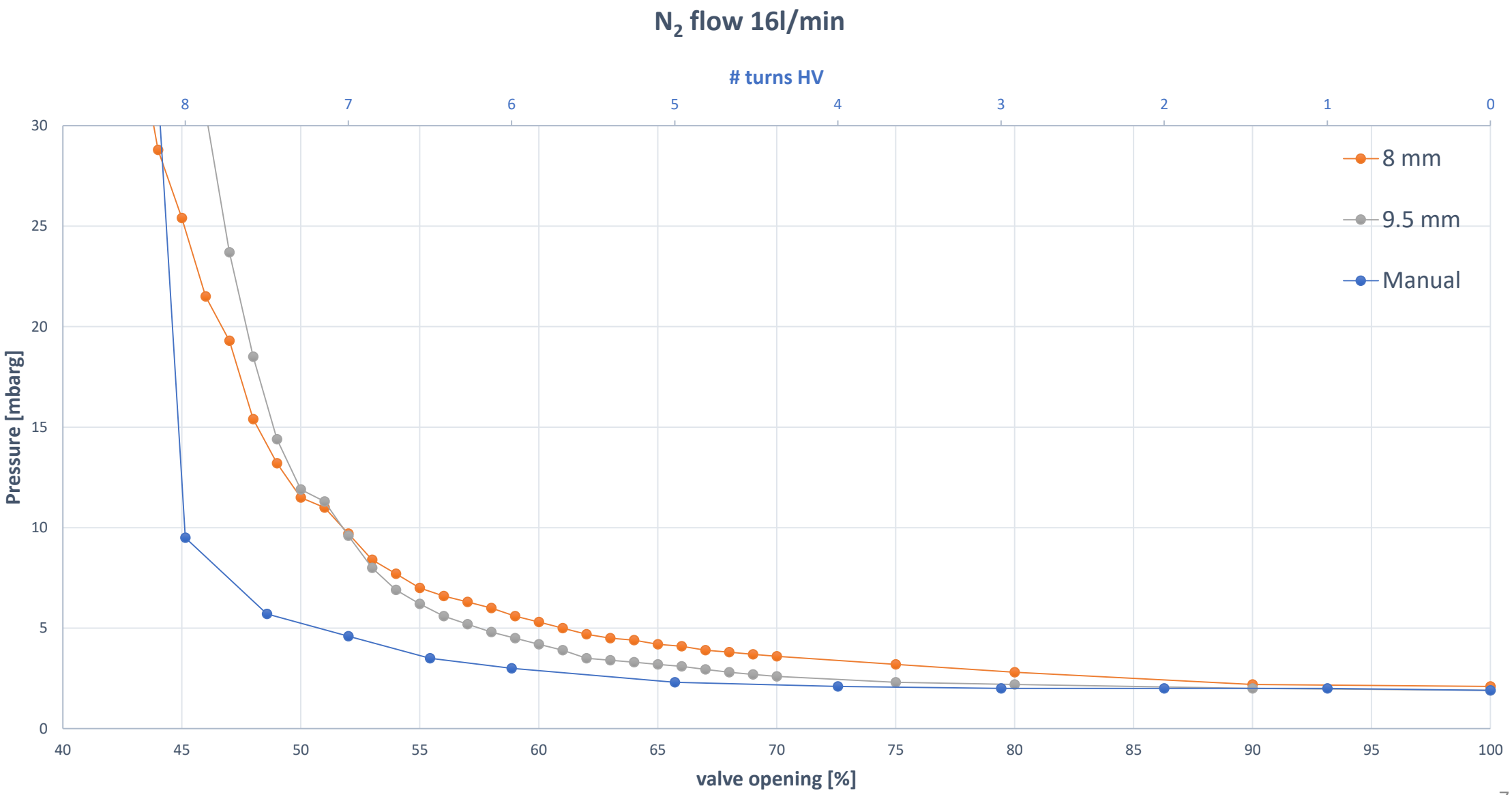
N_2 - 32 l/min



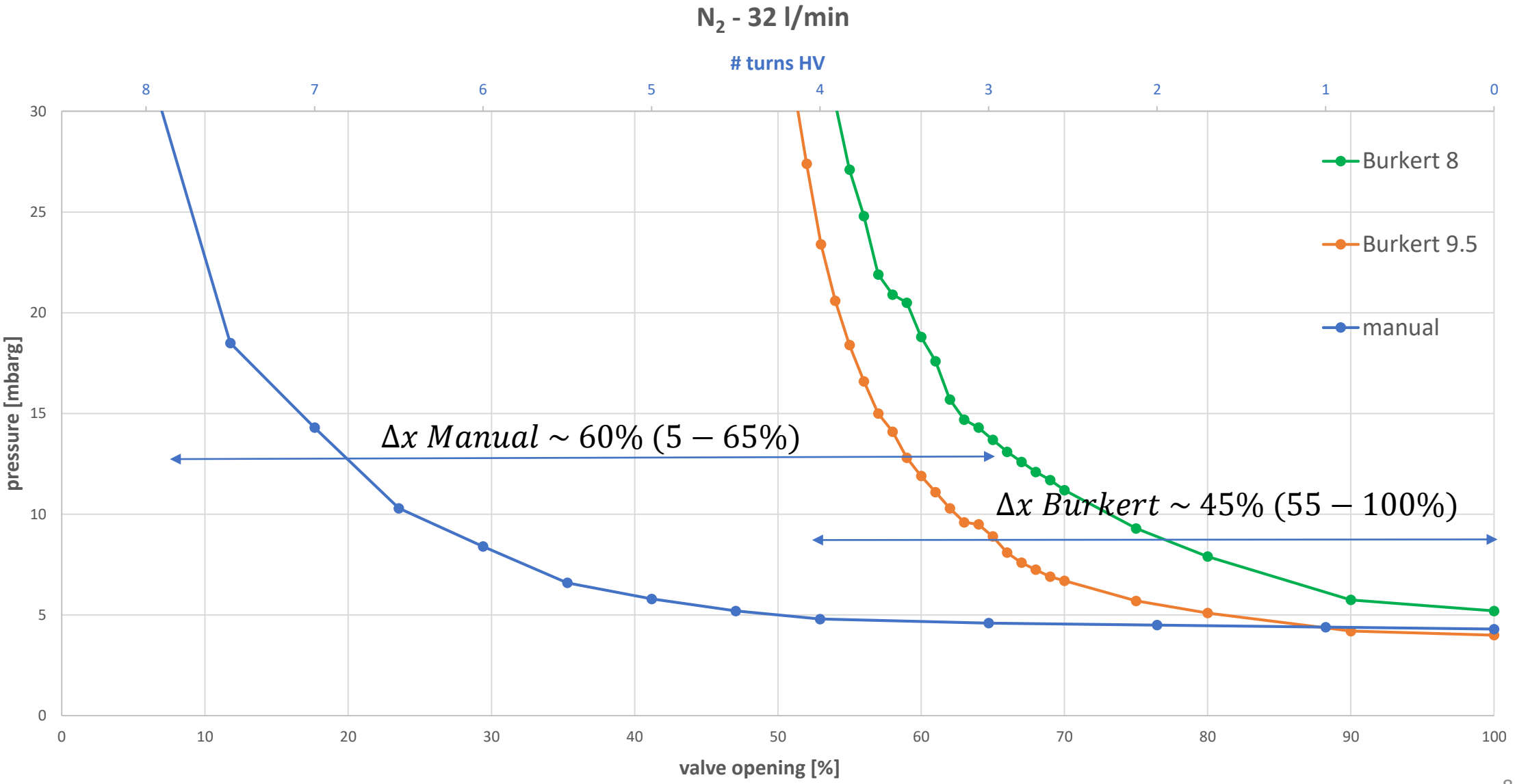
Comparison Burkert VS Manual



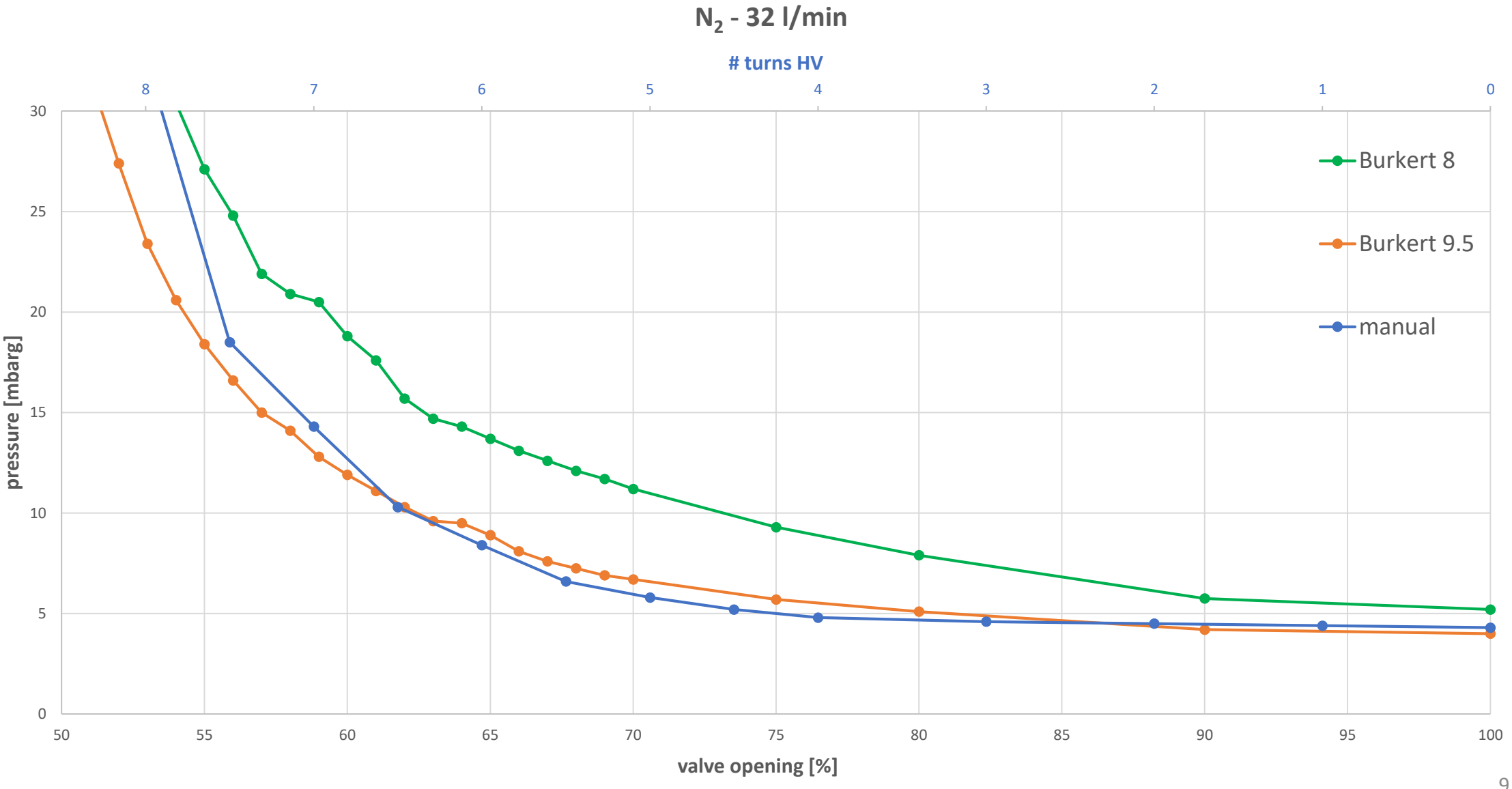
Comparison: shifted curve



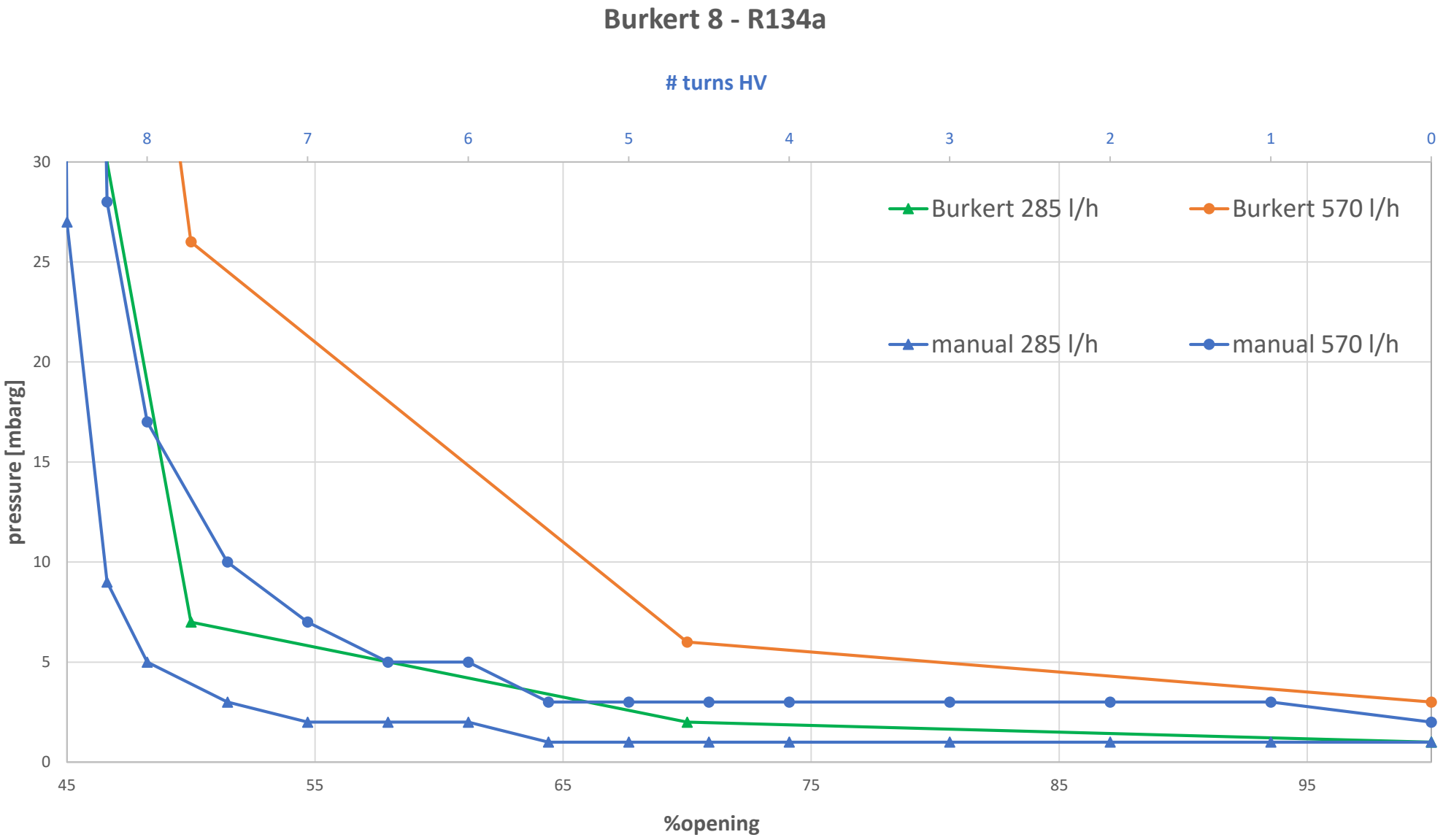
Comparison Burkert VS Manual



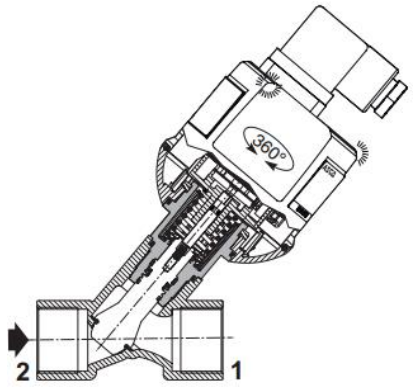
Comparison: shifted curve



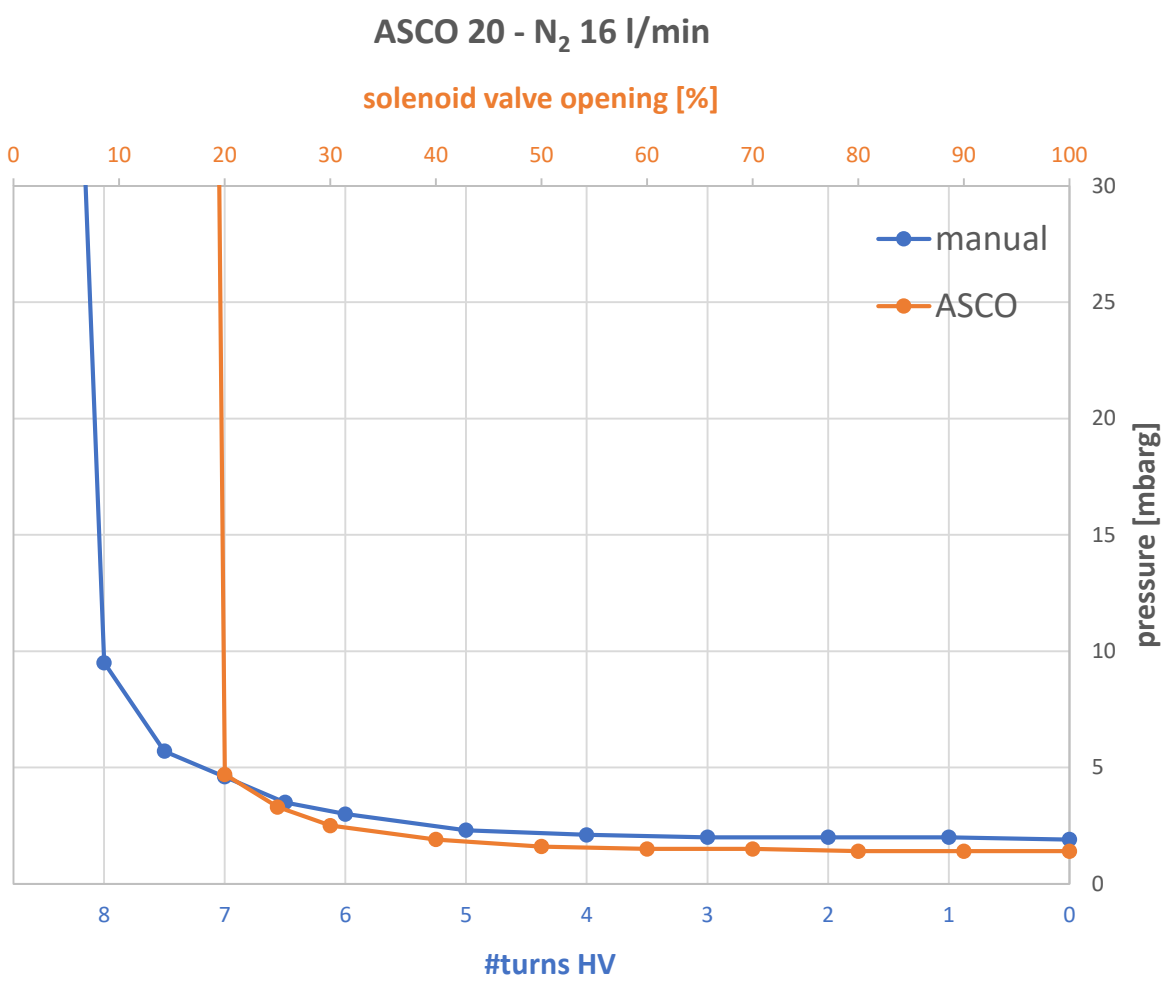
Burkert Freon

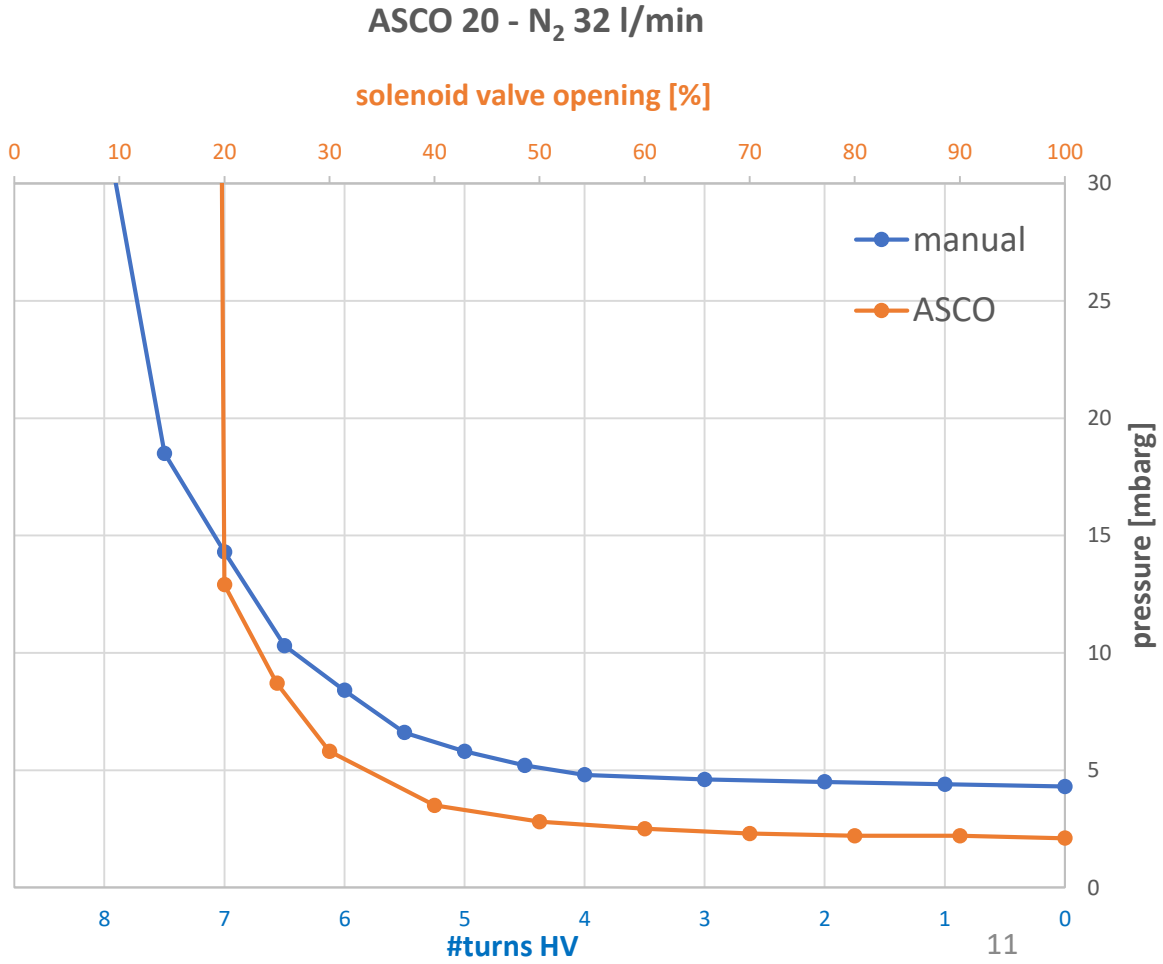


ASCO Valve



EDH: 7777552
2/2 proportional motorized valve, Rp 3/4, DN 20 mm, 0 to 4 bar, AISI 316L / FPM, 4 - 20mA.
Cost ~ 315 CHF

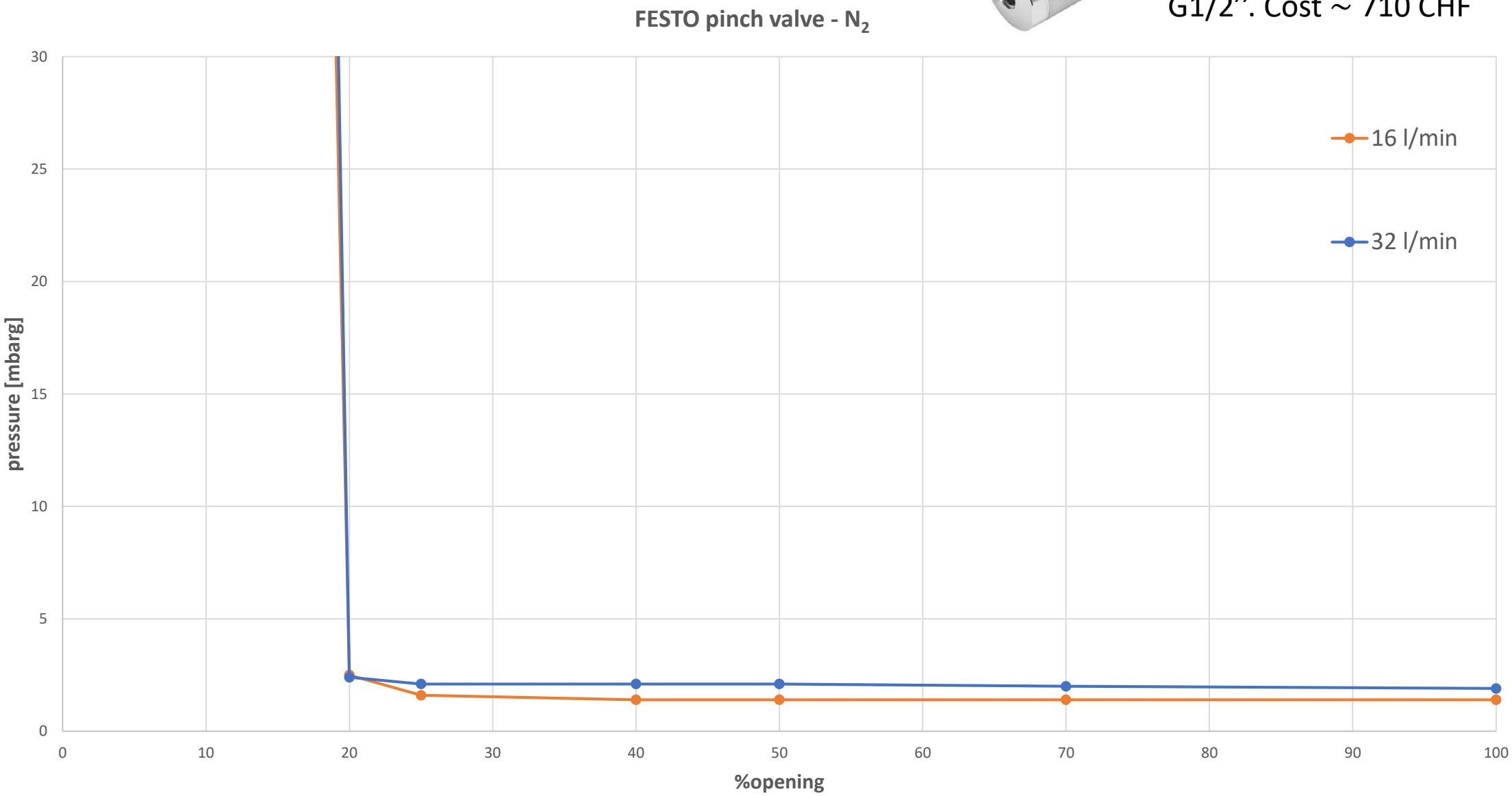




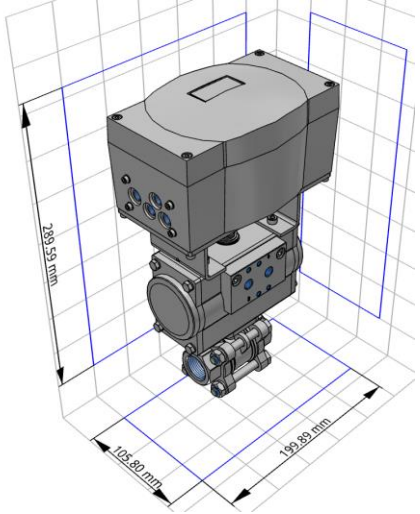
FESTO Pinch Valve



EDH: 7940635
2/2 Pneumatically actuated pinch valve in stainless steel, NC, DN15. G1/2''. Cost ~ 710 CHF

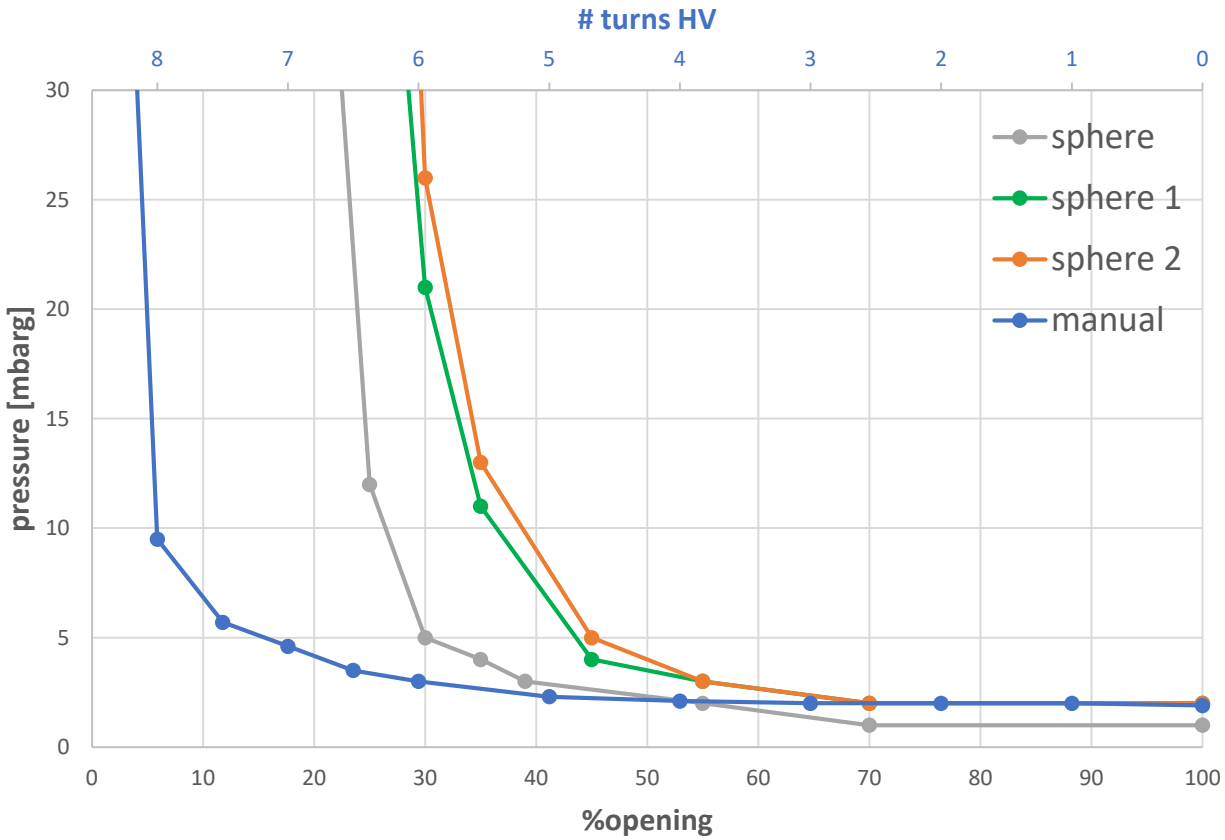


FESTO Pneumatic Valve

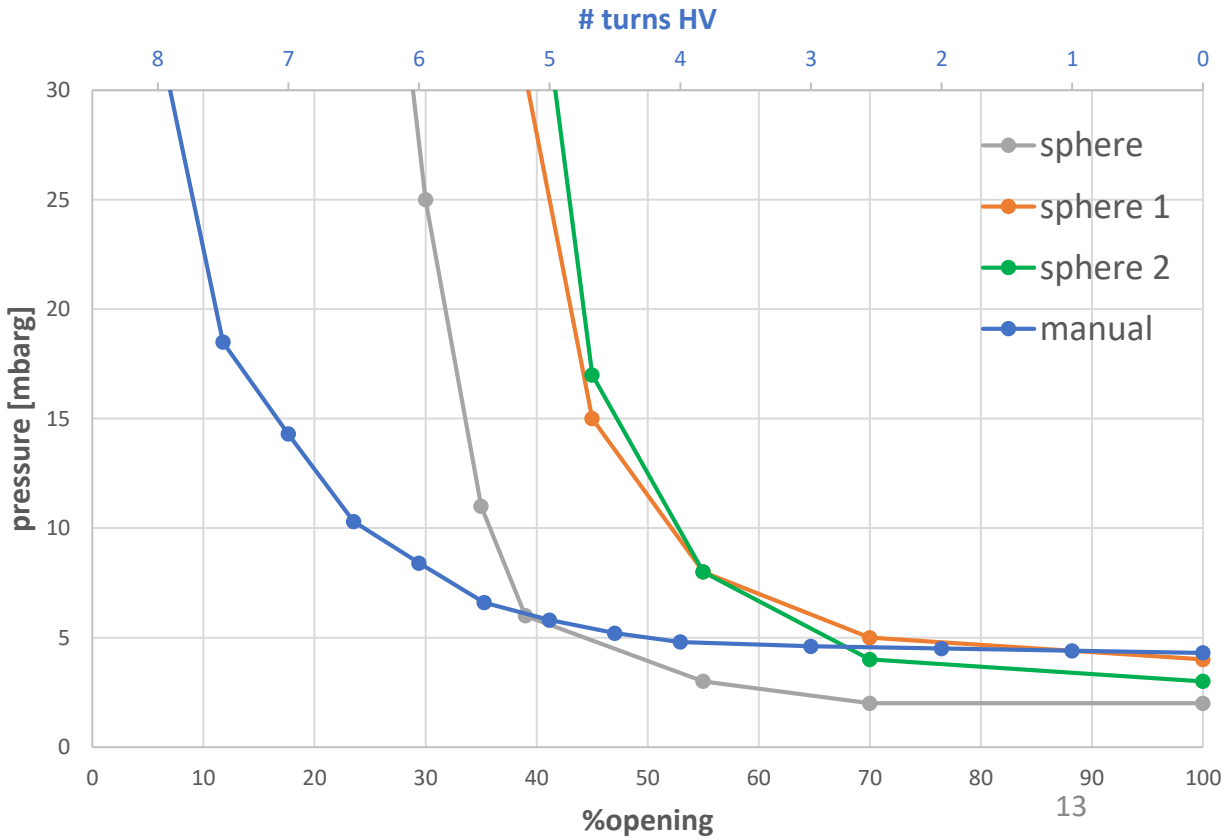


EDH: 7940635
2/2 Vanne à boisseau sphérique asservie par un contrôleur, NC, G1/2''. Cost ~ 620 CHF

N_2 - 16 l/min



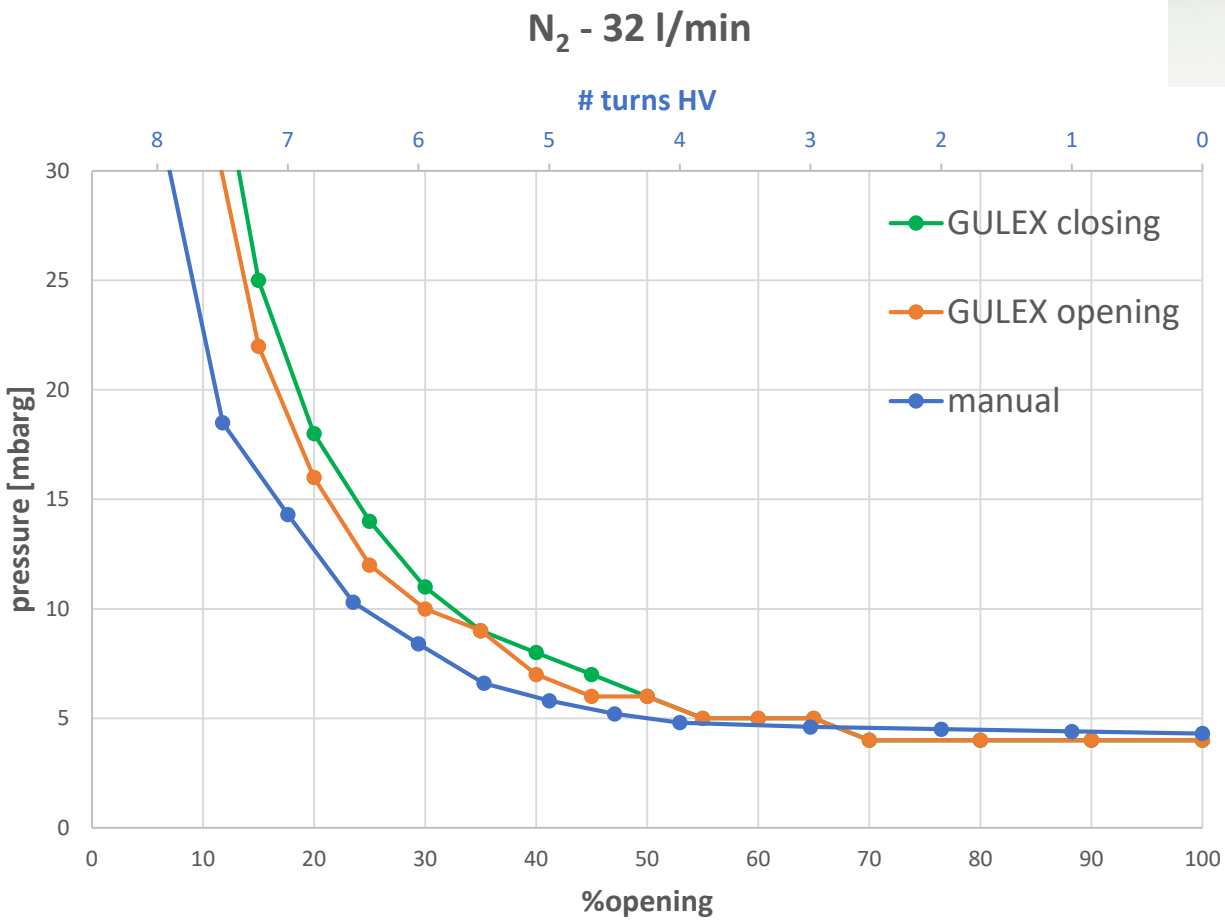
N_2- 32 l/min

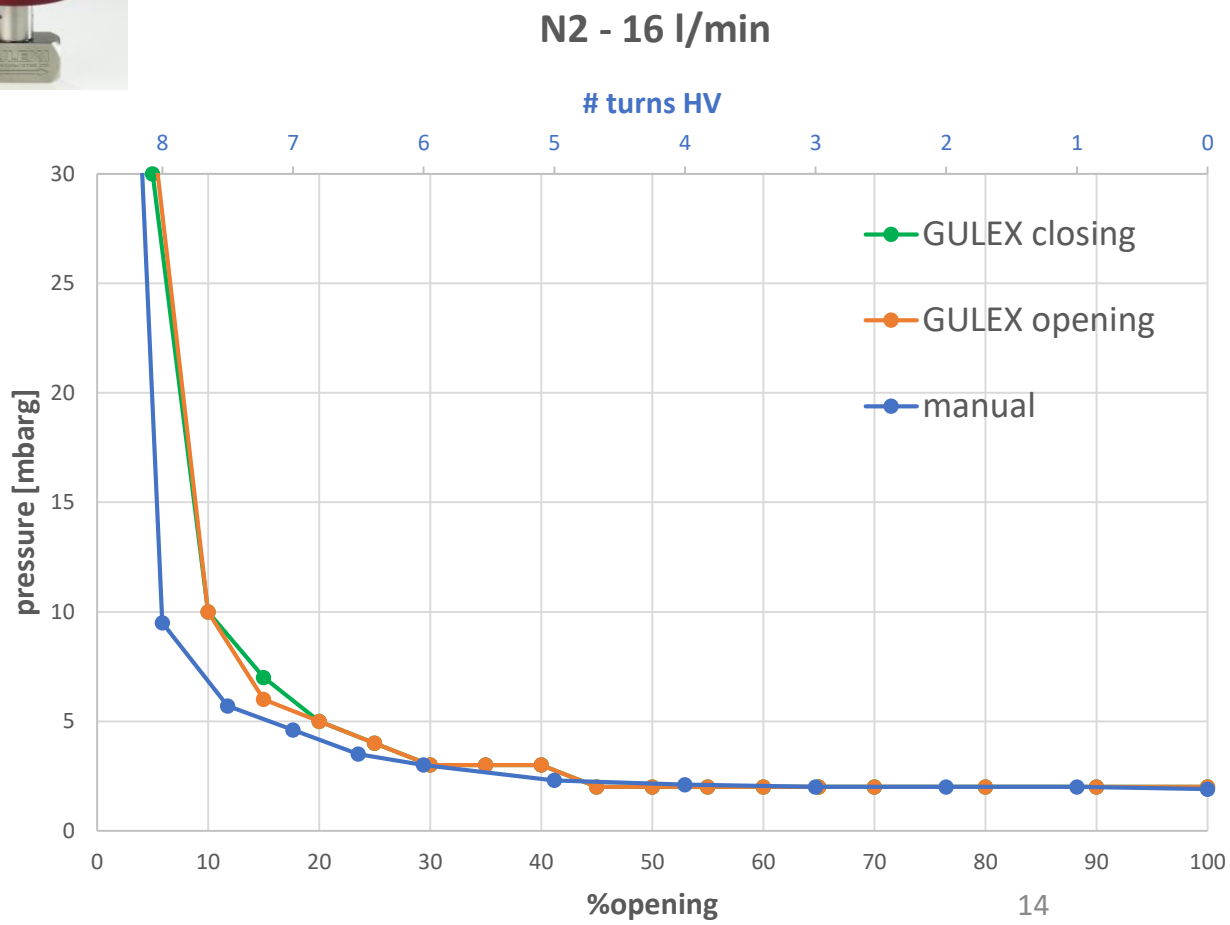


GULEX valve actuator



EDH: 7966173
Actuator N802/P7.
Position Signal 4-20 mA.
Supply voltage 24VDC.
Cost ~ 1400 CHF

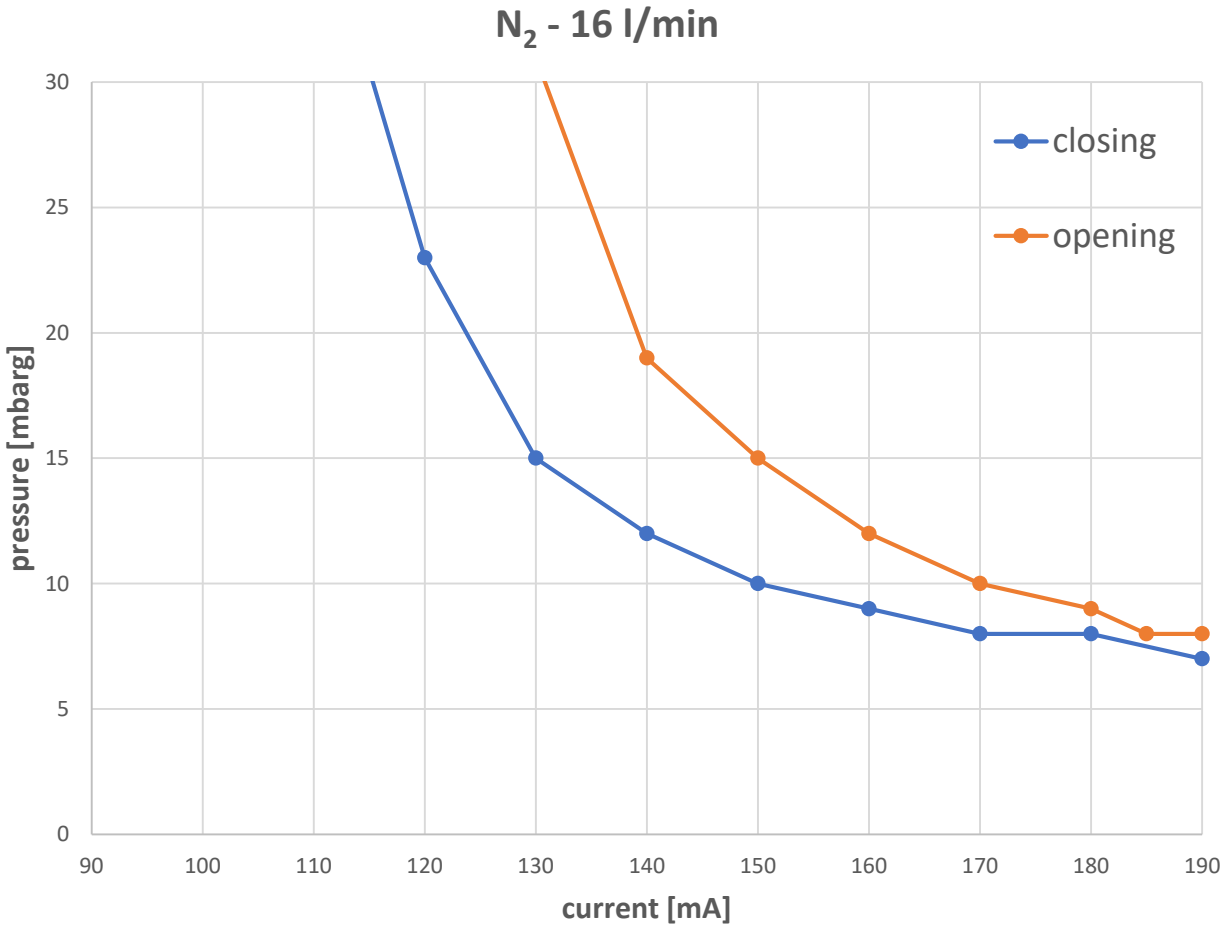


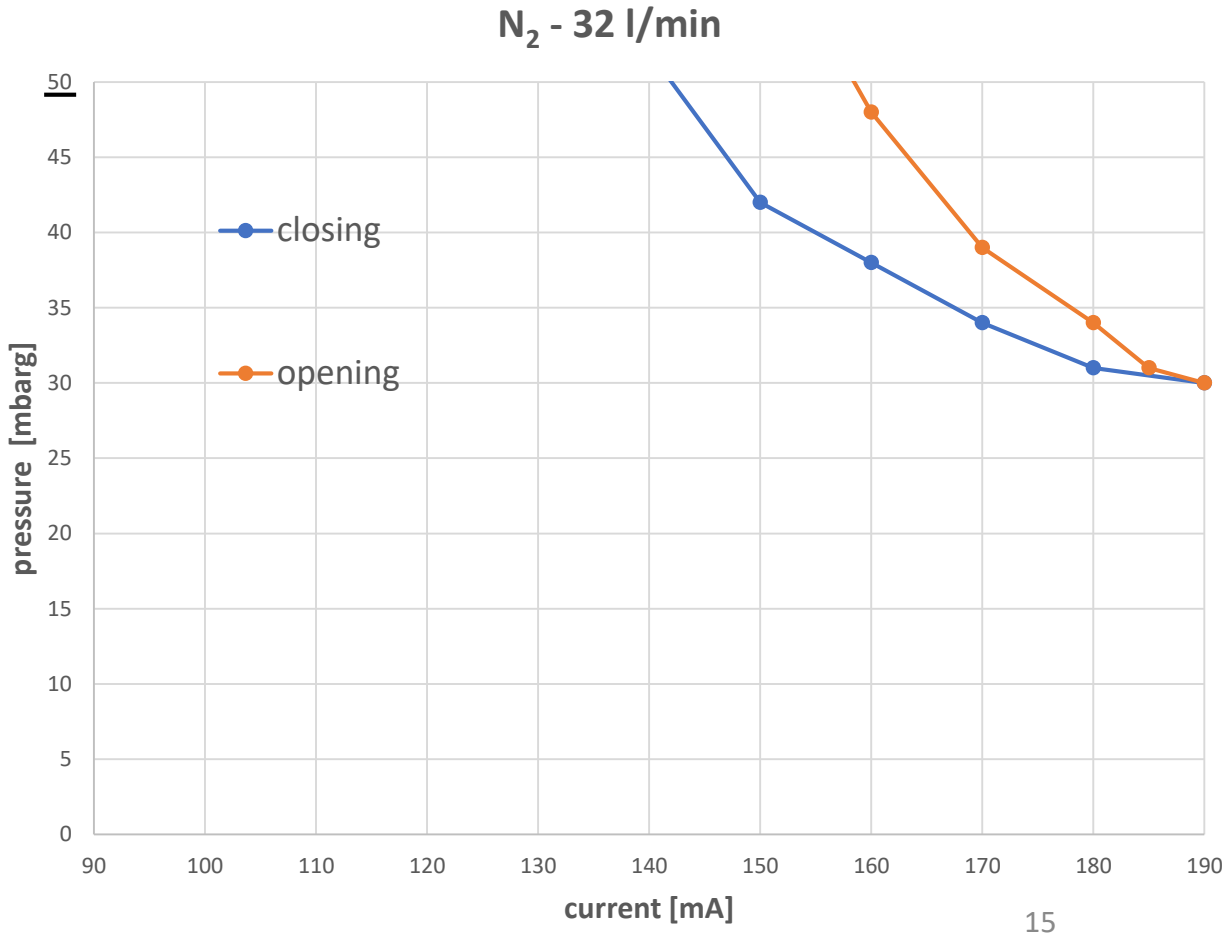


Bronkhorst F004AC

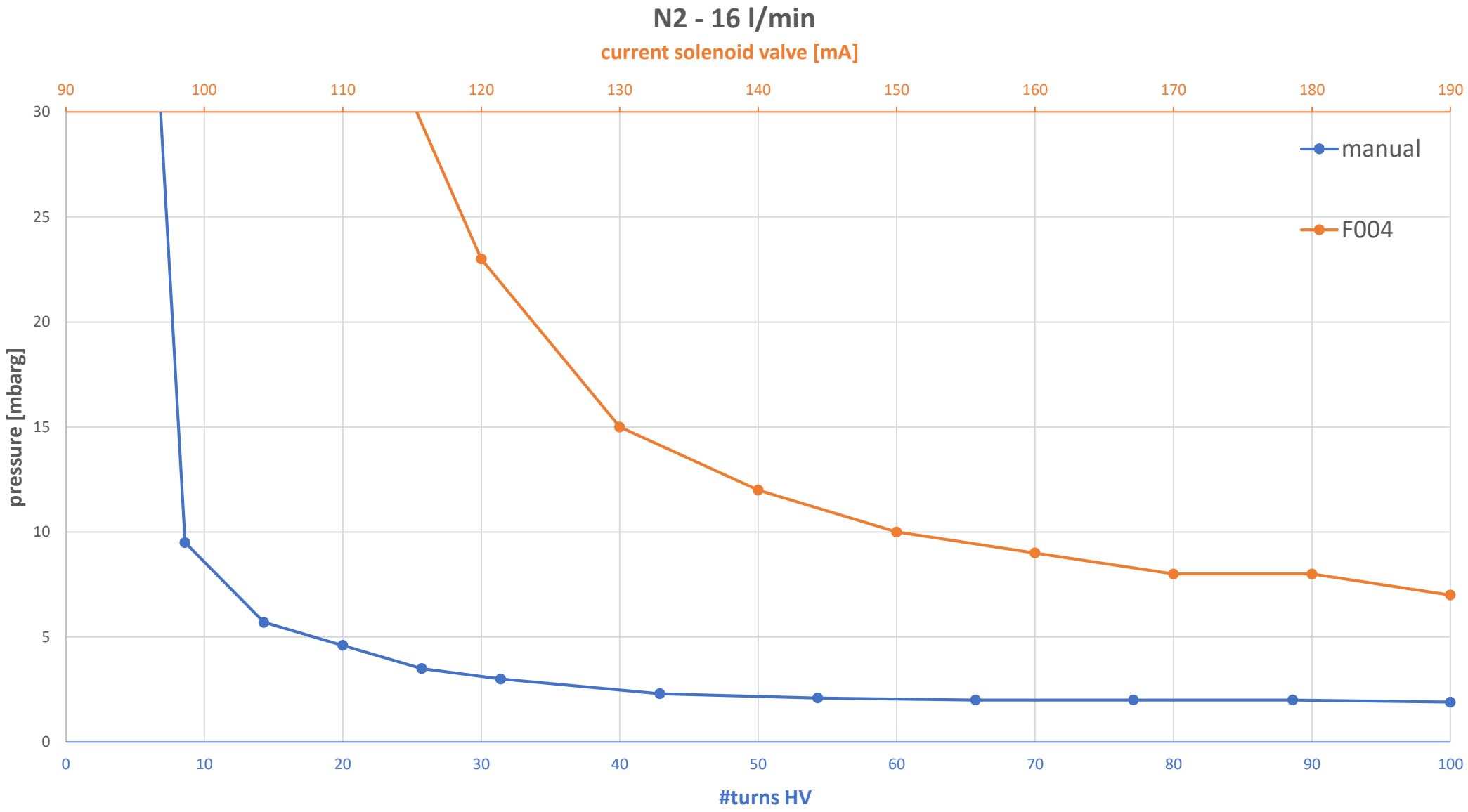


EDH: 7997393
Pression amont (P1) : 210 mbar (g)
Pression aval (P2) : 0...190 mbar (g)
Vanne NF au repos.
Connexion: 1/4" double bagues à compression
Cost ~ 1460 CHF

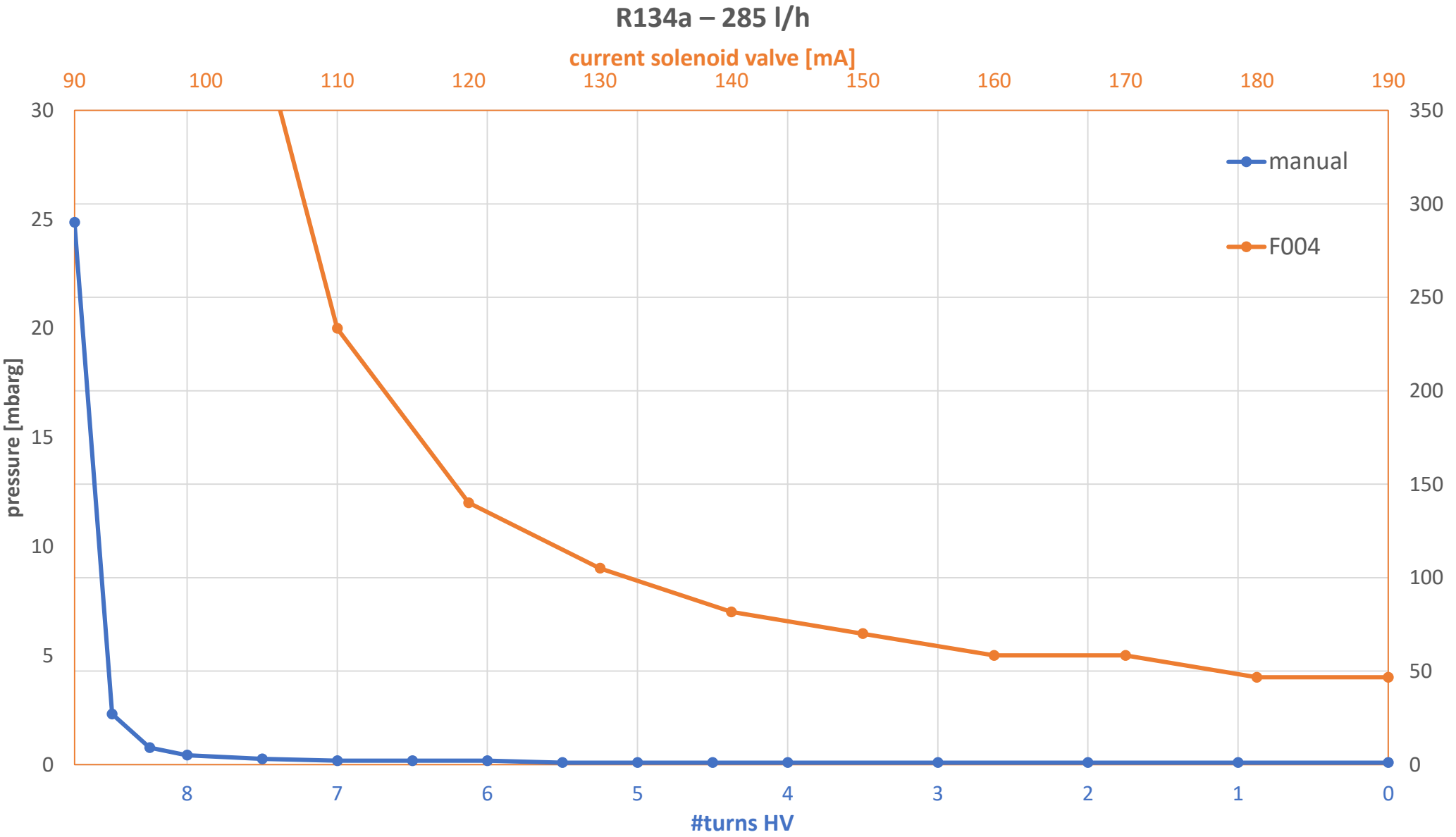




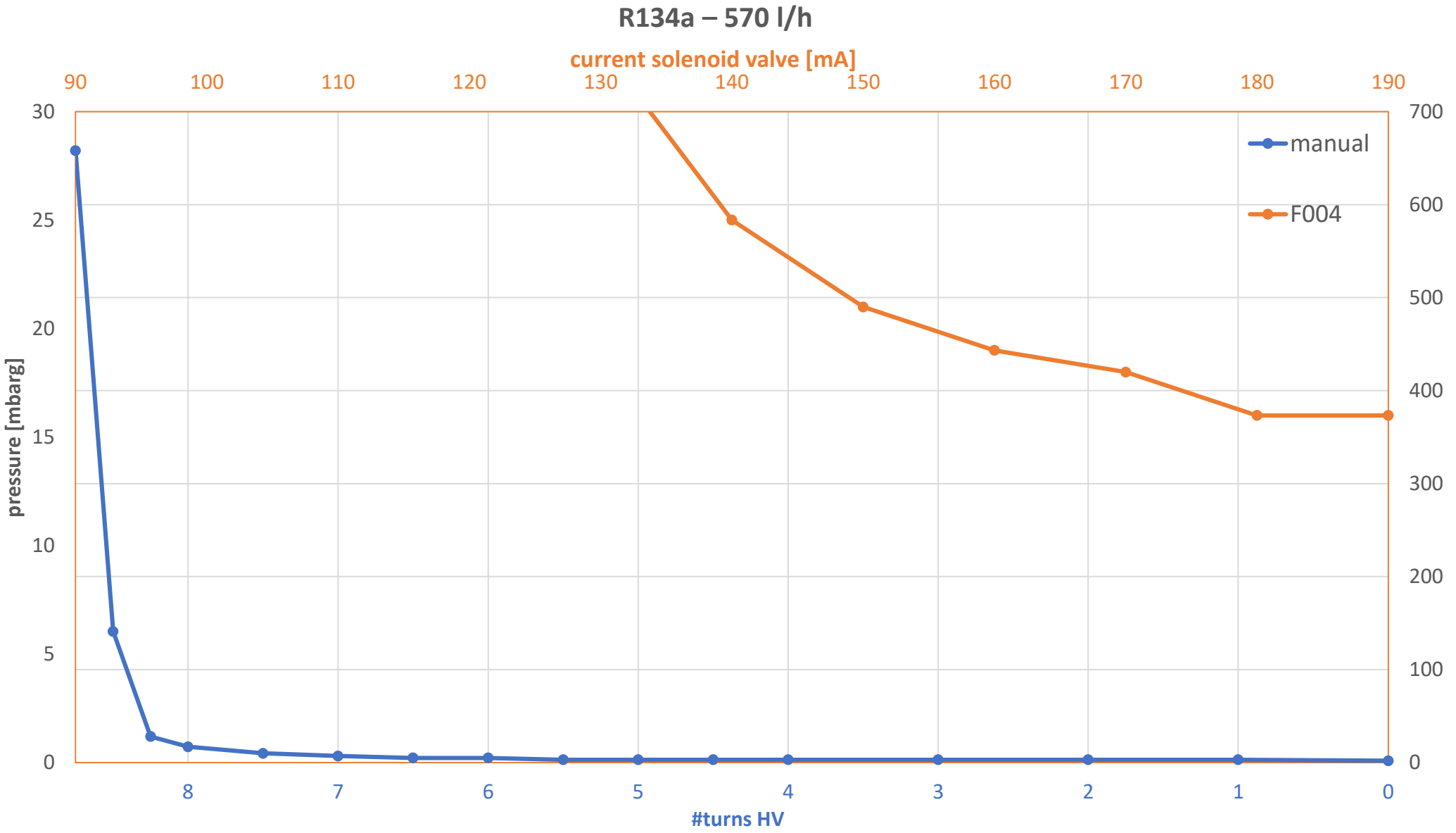
Comparison Bronkhorst - Manual



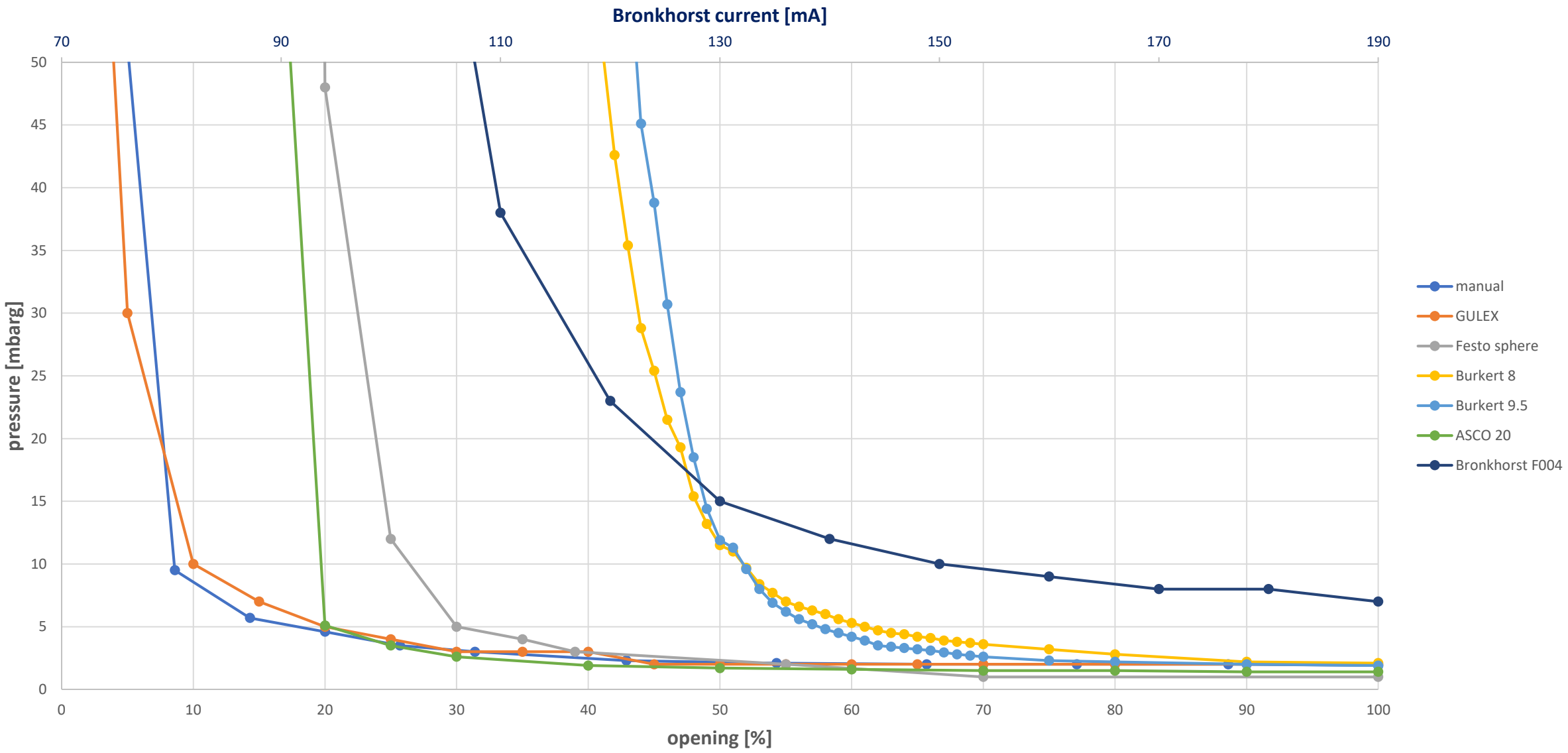
Comparison Bronkhorst - Manual



Comparison Bronkhorst - Manual



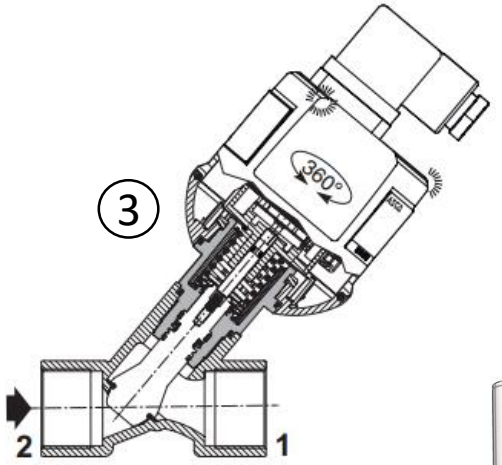
General Comparison – 16 l/min N_2



What we want to install

1. Burkert 8mm and 9.5mm
2. ROTAREX MANUAL VALVE
   WITH GULEX ELECTRIC MOTOR
3. ASCO DN15 or DN20
4. BRONKHORST F004









Still waiting for…

1. Resolution air pinch valve demo kit
   (EDH 7954135; Cost ~ 1300 CHF)

2. Von Rohr (waiting for sample)

3. Asco 15
   (EDH 7946592; Cost ~ 320 CHF)

4. Econex
   (EDH 8035314; Cost ~ 500 CHF)





