Series 1 and 3 Mechanically Operated Valves

Cv = .52 - 1.31

3-way/2-position and 5-way/2-position
Ports 1/8" and 1/4" NPTF
Series 1: 1/8" and 1/4" NPTF
Series 3: 1/8" NPTF

The mechanically operated valves in the Series 3 (1/8") have been designed with three different types of actuation:
– plunger
– lever/roller
– unidirectional lever/roller
In each case, return is effected by a mechanical spring.
The Series 3, 3-way/2-position valves are normally closed in the rest position when the pressure is supplied at P and are normally open when the pressure is supplied at the connection R, the user port A remaining unchanged.
Moreover, the 5-way/2-position valves may be supplied via the ports R and S with two different pressures if a cylinder has to be operated using a delivery pressure which is different from the return pressure. They can be operated with vacuum down to -.9 bar (28" Hg). Additionally, the series 3 valves can be supplied with 2 different pressures into ports 3 and 5 if a cylinder requires different extend and retract forces. The series 1 valves offer a more rugged, compact design with steel operator interfaces.

TECHNICAL SPECIFICATIONS

Valve group	3/2, 5/2, (way/positions)
Construction	Spool type Series 3; Poppet type series 1
Mounting	Mounting holes in valve body
Materials	Anodized body, Stainless steel spool, Buna-N seals
Threaded port size	1/8" and 1/4" NPTF
Installation	Single panel mount
Operating temperature	32° F - 175° F, (dry air necessary down to _4° F)
Fluid	Filtered air (25 micron or less recommended)
Lubricant	Not required; otherwise, oil compatible with Buna-N, (3° - 10° E) (ISOVG32 grade; 32 centistrokes)

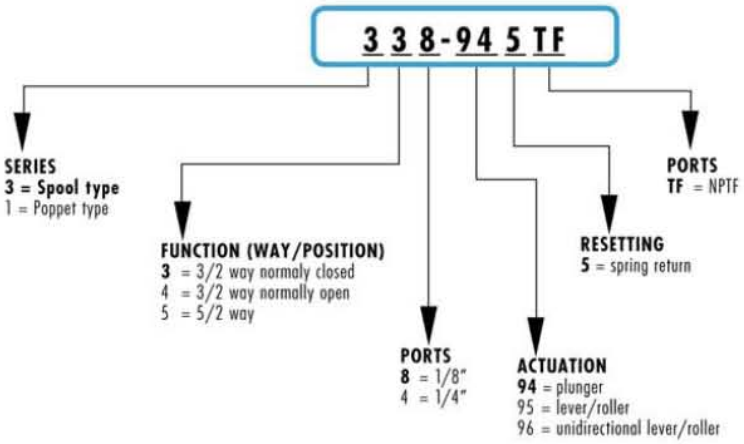
PNEUMATIC DATA

Operating pressure	0 - 10 bar, (0 - 145 psi) (down to -.9 bar vacuum; 28" Hg with Series 3)
Nominal pressure	6 bar (87 psi)
Nominal flow	*Qn Series 1: 1/8" = 500 NL/min. (17.65 SCFM); 1/4" = 1250 NL/min. (44.14 SCFM)
	Series 3: 1/8" = 700 NL/min. (24.7 SCFM)
Nominal Diameter	1/8" = 5 mm
Cv Rating	Series 1: 1/8" = 0.52; 1/4" = 1.31
	Series 3: 1/8" = 0.73

*Qn flowrate (SCFM) determined with a supply pressure of 6 bar, (87 psi), and with a pressure drop of 1 bar, (14.5 psi)
**Dimensions are in millimeters

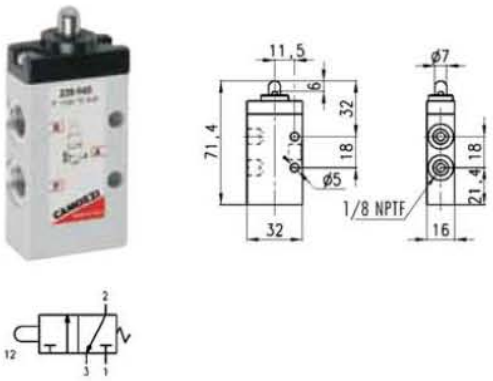
Cv = .73

CODING OF MINIVALVES



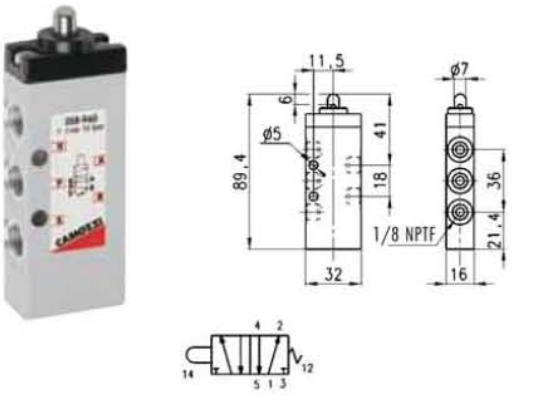
Valves Mod. 338-945TF — Cv = .73

Actuating force at 6 bar (87 psi) = 32N (7.19 lbs.)



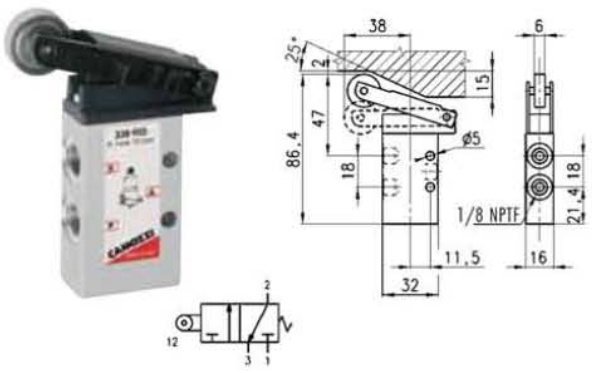
Valves Mod. 358-945TF — Cv = .73

Actuating force at 6 bar (87 psi) = 35N (7.87 lbs.)



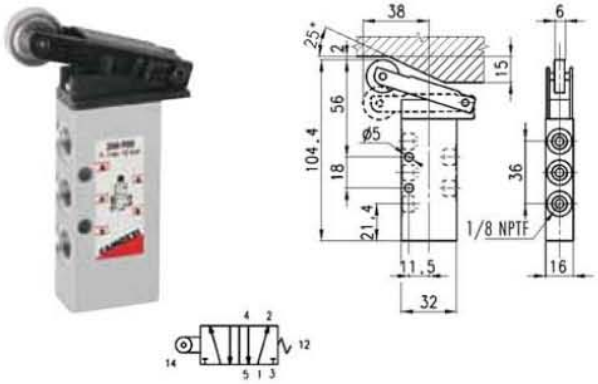
Valves Mod. 338-955TF — Cv = .73

Actuating force at 6 bar (87 psi) = 15N (3.37 lbs.)
Note: roller and plunger are made of stainless steel. (AISI 303)



Valves Mod. 358-955TF — Cv = .73

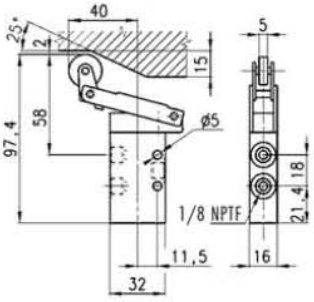
Actuating force at 6 bar (87 psi) = 17N (3.82 lbs.)
Note: roller and plunger are made of stainless steel. (AISI 303)



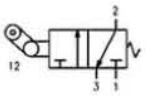
Cv = .52 - .73

Valves Mod. 338-965TF — Cv = .73

Actuating force at 6 bar (87 psi) = 15N (3.37 lbs.)
Note: roller and plunger are made of stainless steel. (AISI 303)

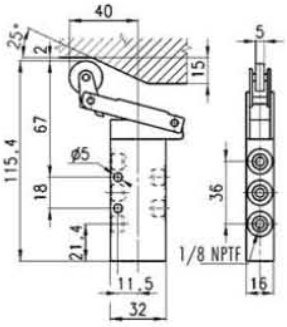


Mod.
338-965TF

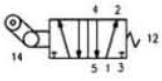


Valves Mod. 358-965TF — Cv = .73

Actuating force at 6 bar (87 psi) = 16N (3.60 lbs.)
Note: roller and plunger are made of stainless steel. (AISI 303)

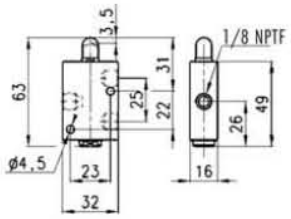


Mod.
358-965TF

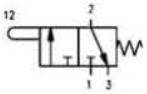


Valves Mod 138-945 TF — Cv = .52

Operating pressure = 0 - 10 bar (0-145 psi)
Flow rate = 500 Nl/min. (17.65 SCFM)
Actuating force at 6 bar = 70N (15.7 lbs)

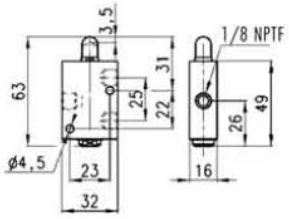


Mod.
138-945TF

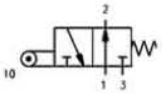


Valves Mod 148-945 TF — Cv = .52

Operating pressure = 0 - 10 bar (0-145 psi)
Flow rate = 500 Nl/min. (17.65 SCFM)
Actuating force at 6 bar = 70N (15.7 lbs)

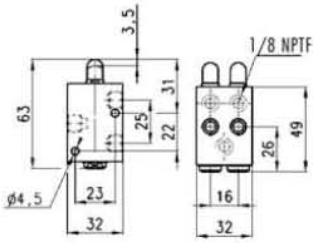


Mod.
148-945TF

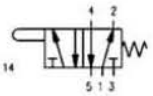


Valves Mod 158-945 TF — Cv = .52

Operating pressure = 0 - 10 bar (0-145 psi)
Flow rate = 500 Nl/min. (17.65 SCFM)
Actuating force at 6 bar = 120N (26.9 lbs) total combined

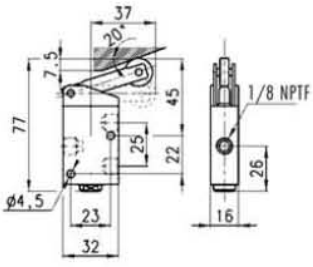


Mod.
158-945TF

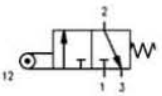


Valves Mod 138-955 TF — Cv = .52

Operating pressure = 0 - 10 bar (0-145 psi)
Flow rate = 500 Nl/min. (17.65 SCFM)
Actuating force at 6 bar = 36N (8.08 lbs)

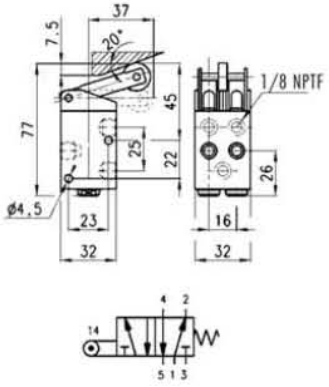


Mod.
138-955TF



Valves Mod 158-955 TF — Cv = .52

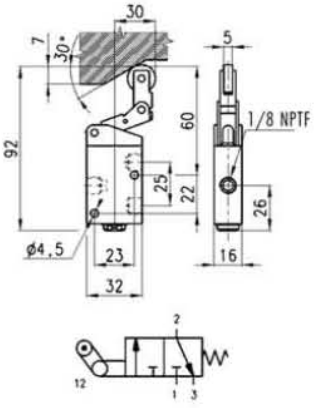
Operating pressure = 0 - 10 bar (0 - 145 psi)
Flow rate = 500 Nl/min. (17.65 SCFM)
Actuating force at 6 bar = 92N (20.65 lbs) total combined



Mod.
158-955TF

Valves Mod 138-965 TF — Cv = .52

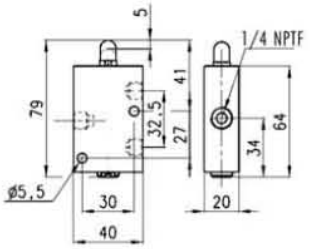
Operating pressure = 0 - 10 bar (0 - 145 psi)
Flow rate = 500 Nl/min. (17.65 SCFM)
Actuating force at 6 bar = 41N (9.2 lbs)

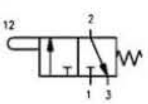


Mod.
138-965TF

Valves Mod 134-945 TF — Cv = 1.31

Operating pressure = 0 - 10 bar (0 - 145 psi)
Flow rate = 1250 Nl/min. (44.14 SCFM)
Actuating force at 6 bar = 64N (14.37 lbs)

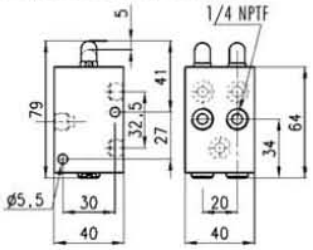


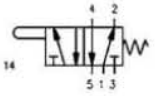


Mod.
134-945TF

Valves Mod 154-945 TF — Cv = 1.31

Operating pressure = 0 - 10 bar (0 - 145 psi)
Flow rate = 1250 Nl/min.(17.65 SCFM)
Actuating force at 6 bar = 147N (33.0 lbs) total combined

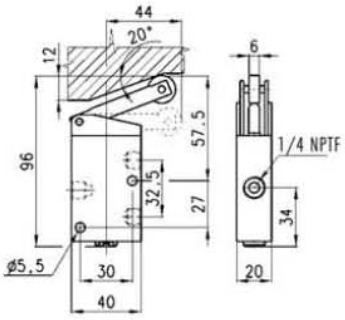


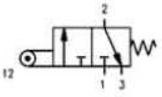


Mod.
154-945TF

Valves Mod 134-955 TF — Cv = 1.31

Operating pressure = 0 - 10 bar (0 - 145 psi)
Flow rate = 1250 Nl/min. (17.65 SCFM)
Actuating force at 6 bar = 41N (9.2 lbs)

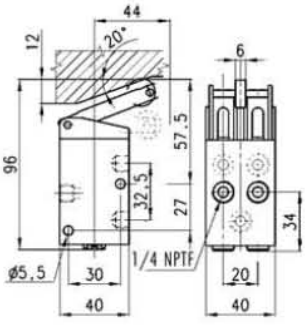




Mod.
134-955TF

Valves Mod 154-955 TF — Cv = 1.31

Operating pressure = 0 - 10 bar (0 - 145 psi)
Flow rate = 1250 Nl/min. (17.65 SCFM)
Actuating force at 6 bar = 110N (24.7 lbs) total combined



Mod.
154-955TF