

ANNEXURE-I**Item No 1****Solenoid Valve**

Valve function: 5/2 monostable
Actuation type: Electrical
Build. Width [mm]:14
Normal nominal flow [l/min]:800
Operating pressure [bar]:3 to 8
Construction set up Piston pusher
Reset mode: Pneumatic spring
Protection category: IP65, IP67 with Socket acc. to IEC 60529
Nominal width [mm]:6
Sealing principle: Soft
Installation position: arbitrary
Hand assist actuation: With Accessories ratcheting tentative
Control type: pilot operated
Control air supply: Internal
Flow direction: Not reversible
Valve space – labelling: Sign carrier
Shifting time off [ms]:32
Shifting time on [ms]:24
Power-on time: 100 %
Max. Positive test impulse at 0 signal [μ s]:1.200
Max. Negative test impulse for 1 signal [μ s]:900
Coil characteristic value: 24 V DC: 1,28 W
Permitted voltage oscillations:-15 % / +10 %
Operating medium: Compressed air to ISO 8573-1:2010 [7:4:4]
Oiled operation possible (required in further operations)
Oscillation strength: Transport use test with severity level 2 to FN 942017-4and EN 60068-2-6
Shock resistance: Shock test with degree of severity 2 to FN 942017-5 and EN 60068-2-27
Corrosion resistant class KBK: 2 - moderate corrosion stress
Medium temperature [$^{\circ}$ C]:-5 to 50
Ambient temperature [$^{\circ}$ C]:-5 to 50
Electrical connection: M8x1, 4 pin
Fastening type: With throughway bores
Exhaust control connection 82:M3
Control air 12 connection: M3
Pneumatic connection 1:G1/8
Pneumatic connection 2:G1/8
Pneumatic connection 3:G1/8
Material information: RoHs compliant
Seals material: NBR
Housing material: Aluminium die-casting
Exhaust function: Can be throttled
Exhaust control connection 84:M3
Control air 14 connection: M3
Pneumatic connection 4:G1/8

Pneumatic connection 5:G1/8

Max. Tightening torque plug [Nm]:0,-4

2) ITEM NO 2

Mini Slide for CNC Cropping machine

Double acting

Design Kinematic yoke system

Guide Parallel piston rods, ball bearing guide

Stroke=10 mm

Adjustable end-position range/length=12 mm

Piston diameter=16 mm

Port Size (mm)=M 5

Operating mode of drive unit=Yoke

With flexible cushioning elements in the end positions

Position sensing for proximity sensing

Assembly position=any

Guide=Ball bearing cage guide

Design structure=Yoke Kinematics

Position detection=for proximity sensor

Working pressure=1... 10 bar

Mode of operation=Double-acting

Operating medium=Compressed air in accordance with ISO 8573-1:2010(7:4:4)

Corrosion resistance classification CRC0-No corrosion stress

Ambient temperature=-20... 60°C

Impact energy in end positions=0.4 Nm

Max. Force F_y =1,600 N

Max. Force F_z =1,600 N

Max. Torque M_x =16Nm

Max. Torque M_y =16Nm

Max. Torque M_z =8Nm

Theoretical force at 6 bar, return stroke=317 N

Theoretical force at 6 bar, advance stroke=316 N

Mounting type=with through hole

Pneumatic connection=G1/8

Material note Free of copper and PTFW

Material cover=Wrought Aluminium alloy

Material Seals=HNBR

Material housing=Wrought Aluminium alloy

Material piston rod=High alloy steel, non-corrosive

Max. Advancing speed [m/s] =0.8

Max. Retracting speed [m/s] =0.8

Repetition accuracy Stop PF [mm] =0.02

Piston speed v as a function of working load: The piston speed should not be less than 0.1 m/s, as otherwise the service life of the shock absorber will be reduced.

Total length=97 mm

Hole pattern for mounting thread and centering holes: Distance between hole centres=40 mm