

Service Port: G 1/4; Plug-on Connector 6/4  
36 to 102 PSI; Stroke 0.07 to 2.87 inches



### Advantages/Benefits

- ▶ Decentralized control of process valves optional with multipole or bus connection
- ▶ Can be integrated with process valves
- ▶ AS-I bus connection
- ▶ Modular and universal concept
- ▶ Minimized tubing
- ▶ Internal or external pneumatic piloting
- ▶ Position feedback with inductive indicators
- ▶ NEMA 6 rating
- ▶ Access protection

### Design/Function

The pneumatic actuated control head combined with a flange adapter can be mounted on top of a process valve to integrate this valve into a process control system.

The modular design consists of an electronic and pneumatic control unit, a position indicator with position feedback and intelligent integrated communication electronics.

The following functions can be realized with this control head:

- Pneumatic piloting of piston-operated process valves
  - single / double acting
  - 2 and 3 position actuator
  - additional synchronization for multi-function actuation
  - external pneumatic piloting
- Position feedback with up to 3 level adjustable inductive initiators
- Electronic control optional via multipole (parallel) or via bus connection (AS-I)
- Bursting protection via pressure relief valve

### Applications

#### Fluids

Non-lubricated compressed air, neutral gases

#### Applications

- Food and beverage industry
- Dairies
- Pharmaceutical industry
- Water treatment
- Chemical apparatus engineering
- General process technology

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Operating Data (Fluids)		Operating Data (Electric)	
Materials		Operating voltage	24 VDC or via field bus
Body	Noryl (PPE/PA)	Voltage tolerance	±10%
Cover	PSU (transparent, greyish blue)	Current consumption	5 A
Seal	NBR	Total current requirement (max. per control head)	$I_{Total} = n(50 \text{ mA}) + m(100 \text{ mA})$ n: number of valves m: number of initiators
Fluids	Non-lubricated compressed air, neutral gases	Electrical connection	
Medium temperature	14°F to 122°F	Multipole	8-pole round plug per DIN 45 326, cable ø .15 to .24 in., terminal strip 8-pole (PG 9)
Max. ambient temperature	14°F to 122°F	ASI-Bus	ASI plug (insulation displacement connection) with 3 ft. cable for ASI flat cable (others on request)
Port connections		Solenoid valve	
Pressure / Exhaust port	G 1/4	Operating voltage	24 VDC
Service ports	Plug-on tube hose connector 6/4	Voltage tolerance	±10%
$C_v$	.15 each	Nominal current	Maximum 50 mA
Pressure range <sup>2)</sup>	36 to 102 PSI	Duty cycle	100% continuously rated
Response times <sup>1)</sup>		Initiator	
Opening	15 ms	Operating voltage	8 to 30 V
Closing	10 ms	Output signal	Maximum 100 mA
Stroke range		Installation	Preferably with cover upright, assembly on actuator with flange <b><u>Do not mount upside-down!</u></b>
Min.	0.07 in.		
Max.	2.87 in.		
Weight	1.10 to 1.43 lbs.		
Rating	NEMA 6		
		<sup>1)</sup> <b>Response times [ms]</b>	
		Measured at +68°F, 87 PSI pressure at valve outlet	
		Opening	pressure rise 0 to 90%
		Closing	pressure drop 100 to 10%

<sup>1)</sup> **Pressure ranges [PSI]**

Measured as overpressure to the atmospheric pressure

**Configuring Possibilities****Electric Control**  
**Multipole****ASI**According to ASI specification (supply over signal line)  
Additionally, an LED can be connected for long  
distance indications.

Topology: any (line, star, tree, ring)

Bus status indication on control head

DeviceNet, LON, Profibus and NEMA 4 (IP65) local bus  
(Interbus LOOP) on request**Initiators (0 to 2 units)**

Position feedback

(Clamp for 1 additional indicator - externally / internally)

**Pneumatic Control**  
**Valves (0 to 3 units)**

Single acting actuator (1 valve)

Double acting actuator (2 valves)

Double seat valve with common flow for both valve seats  
(CIP cleaning, 3 valves)

## Ordering Chart Control Head (Other Versions on Request)

Version with Solenoid Valves	Version with Initiators	Electrical Connection	Item No.
0	2	Multipole, round plug 8-pole	193 354 W
1	2	Multipole, round plug 8 pole	193 355 X
2	2	Multipole, round plug 8 pole	193 356 Y
3	2	Multipole, round plug 8 pole	193 357 Z
0	2	Clamp connection (PG 9)	193 358 A
1	2	Clamp connection (PG 9)	193 359 B
2	2	Clamp connection (PG 9)	193 360 G
3	2	Clamp connection (PG 9)	193 361 V
1	2	ASI (insulation displacement connection)	193 362 W
2	2	ASI (insulation displacement connection)	193 363 X
3	2	ASI (insulation displacement connection)	193 364 Y

## Ordering Chart Accessories (Other Versions on Request)

Version / Description	Item No.
Straight screwed plug connection (Noryl - PA/PPA); G 1/4; $\phi$ 8/6; with O-ring	782 300 K
Angle plug screwing; G 1/4; $\phi$ 8/6; 360° rotatable	782 258 L
Blanking-Off plug	780 142 A
Silencer made of sinter bronze; with hexnut; G 1/4	780 788 J

## Flange

**IMPORTANT!**

When producing your own flanges, please request dimensional drawings, as you could risk non-functioning initiators due to insufficient fixing of the head

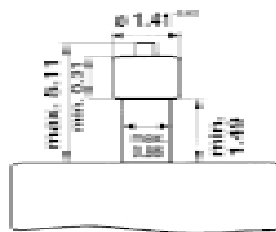
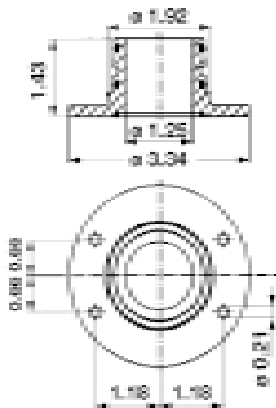
## Upper Stroke Piston of Process Valve

**IMPORTANT!**

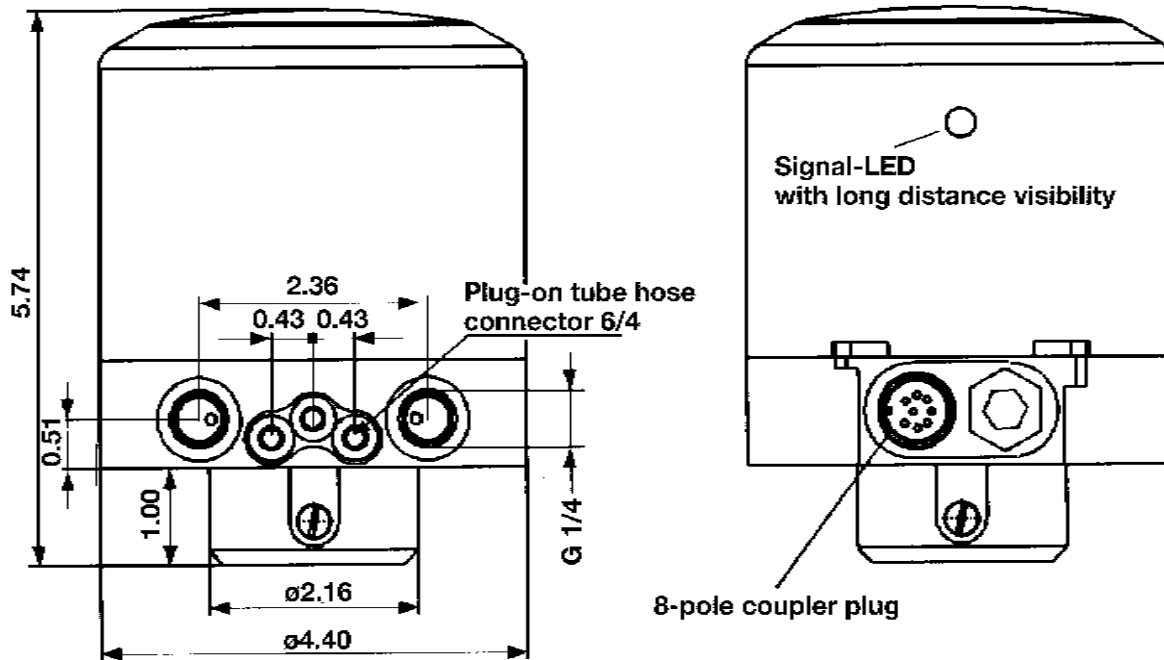
Switch indicator preferably made of ST37 (nickel plated or zinc coated).

Do not use other materials, as it may cause switching errors, especially at heavy vibrations.

## Dimensions [inch]



Dimensions [inch]



Description

