

Service port: G 1/4; plug-on connector 6/4
PN 2.5 up to 7.0 bar; stroke 2.0 up to 73.0 mm



Advantages/Benefits

- ▶ Decentralized control of process valves optional with multipole or bus connection
- ▶ Integrable on process valves
- ▶ ASI bus connection
- ▶ Modular and universal concept
- ▶ Minimized tubing
- ▶ Pneumatic piloting internal or external
- ▶ Position feedback with inductive indicators
- ▶ IP 67 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 an intelligent integrated communication electronics.

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 synchronisation 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 (ASI)
- Bursting protection via pressure relieve valve

Applications

Fluids

Unlubricated compressed air, neutral gases

Applications

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

bürkert
Easy Fluid Control Systems

Operating Data (Fluidic)		Operating Data (Electric)	
Materials		Operating voltage	24 V DC or via field bus
Body	POM (30% glass bead-reinforced)	Voltage tolerance	±10 %
Cover	PSU (transparent, greyish blue)	Total current requirement (max. per control head)	$I_{\text{Total}} = n(50 \text{ mA}) + m(100 \text{ mA})$ n: number of valves m: number of initiators
Seal	NBR	Electrical connection	
Fluids	unlubricated compressed air, neutral gases	Multipole	8-pole round plug acc. DIN 45 326, cable ø 4 up to 6 mm, terminal strip 8-pole (PG 9)
Medium temperature	-10° up to +50°C	ASI-Bus	ASI plug (insulation displacement connection) with 1 m cable for ASI flat cable (others on request)
Max. ambient temperature	-10° up to +50°C	Solenoid valve	
Port connections		Operating voltage	24 V DC
Pressure / Exhaust port	G 1/4	Voltage tolerance	±10 %
Service ports	Plug-on tube hose connector 6/4	Nominal current	max. 50 mA
Q_{Nn} -value air ¹⁾	130 l/min	Duty cycle	100 % continuously rated
Pressure range ²⁾	2.5 up to 7.0 bar	Initiator	
Response times ¹⁾		Operating voltage	8 up to 30 V
Opening	15 ms	Output signal	max. 100 mA
Closing	10 ms	Installation	Preferably with cover upright assembly on actuator with flange <u>Do not mount upside-down!</u>
Stroke range			
Min.	2 mm		
Max.	73 mm		
Weight	0.5 up to 0.65 kg		
Rating	IP 67		
¹⁾ Flow rate: Q_{Nn} -value air [l/min]		¹⁾ Response times [ms]	
Measured at +20°C, 6 bar pressure at valve inlet and 1 bar pressure difference		Measured at +20°C, 6 bar pressure at valve outlet	
²⁾ Pressure ranges [bar]		Opening	
Measured as overpressure to the atmospheric pressure		Closing	
		pressure rise 0 up to 90%	
		pressure drop 100 up to 10%	

Configuring Possibilities

Electric Control Multipole

ASI

according 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 IP65 local bus
(Interbus LOOP) on request

Initiators (0 up to 2 units)

Position feedback

(Clamp for 1 additional indicator - externally / internally)

Pneumatic Control Valves (0 up 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)

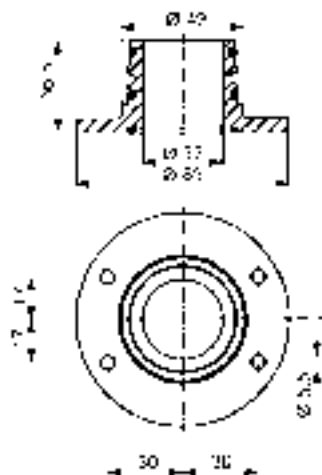
Version with Solenoid Valves	Version with Initiators	Electrical Connection	Item No.
0	2	Multipole, round plug 8-pole	193 354 W
1	2	Multipole, round plug 8 pole	193 355 X
2	2	Multipole, round plug 8 pole	193 356 Y
3	2	Multipole, round plug 8 pole	193 357 Z
0	2	Clamp connection (PG 9)	193 358 A
1	2	Clamp 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 (POM); G 1/4; ø 8/6; with O-ring	782 300 K
Angle plug screwing; G 1/4; ø 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

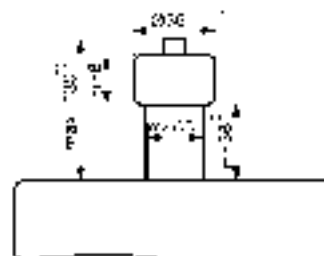
Flange

IMPORTANT!
 When producing own flanges, please request for dimensional drawings, as you could risk a non-function of the initiators due to insufficient fixing of the head

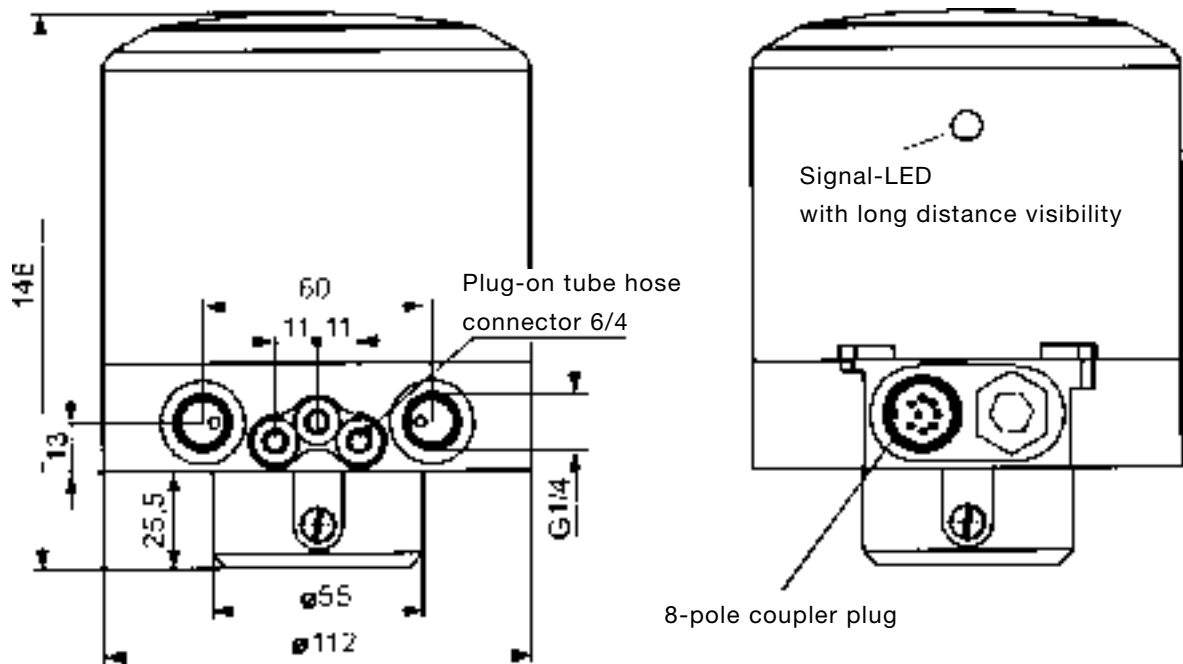


Upper stroke piston of process valve

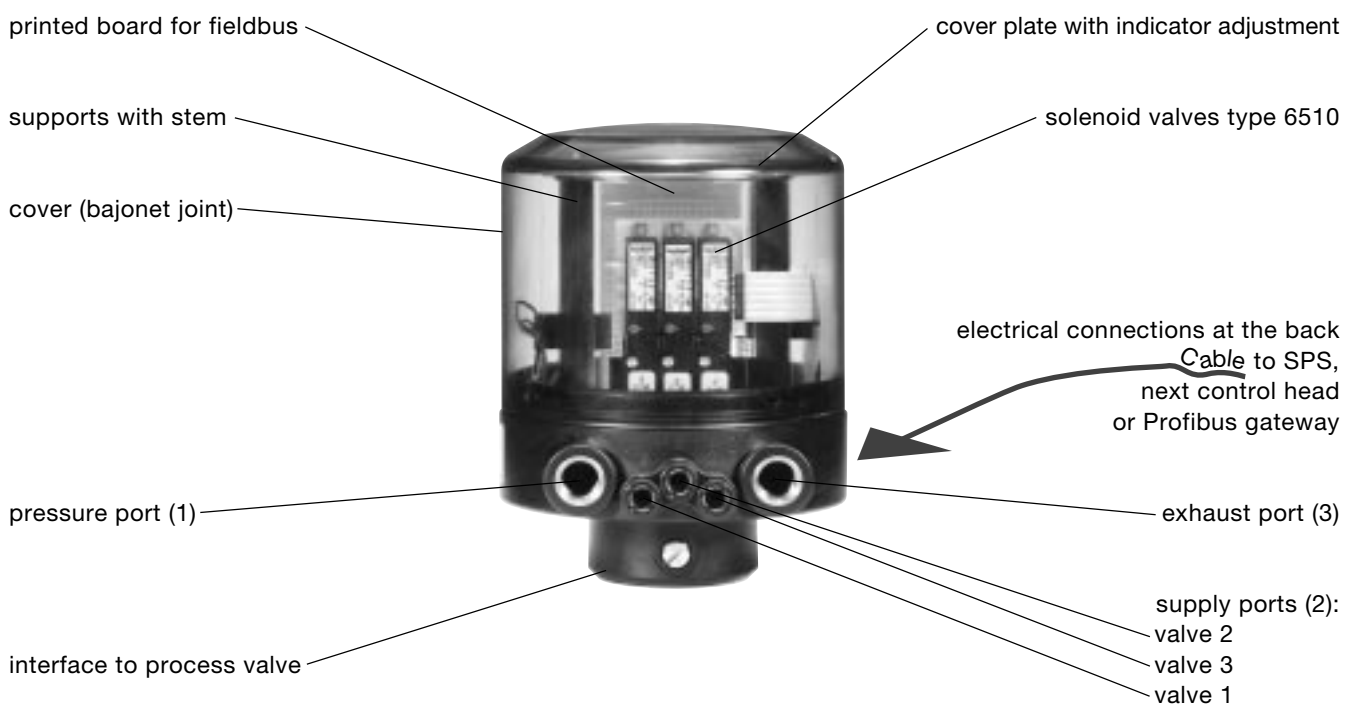
IMPORTANT!
 Switch indicator preferably made of ST37 (nickel plated or zinc coated).
 Do not use other materials, as it may cause switching errors especially at heavy vibrations.



Dimensions [mm]



Description



In case of special requirements please consult for advice. We reserve the right to make technical changes without notice. 805-GB/ 2-0160