Control Tops and Feedback Packages for Pneumatically Actuated Valves

Type 8691

Type 8690

- Spring chamber vent
- Flushing function
- Optical position indicator
- Integrated air supply

The pneumatic control units, Type 8690 and Type 8691, are optimised for the integrated mounting on process valves series 21XX. At the 8691 bright coloured LEDs indicate the current status of the process valves (visible from a distance). Chemically resistant PPS housing is designed in accordance with EHEDG guidelines for use in hygienic environments. Especially for the system cleaning the IP protection of the housing is supported by overpressure in the control head.
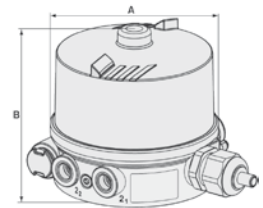
Envelope Dimensions [mm]
(see datasheet for details)

Type 8690

Type 8691

Type	A	B
8690	91	86
8691	91	119

Technical Data

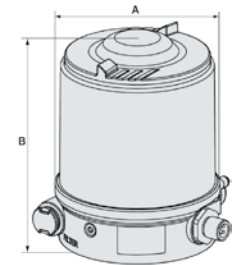|	8690	8691
Pilot valve	24 V DC ±10%, residual ripple 10% (no technical direct current); 1 W	24 V DC ±10%, residual ripple 10% (no technical direct current); 2 W
Micro switch	Max. 24 V DC, max. 2A	
Initiator	10 to 24 V DC, max. 100 mA ext. load per initiator	PNP, 10 to 24 V DC, max. 100 mA
Electrical connection	Cable gland or 8-pin M12	Cable gland or 8-pin M12 , AS-i Connect
Buses available	–	DeviceNet, AS-i
Optical feedback	–	SuperBRIGHT LED
Media	Instrument air	Instrument air
Body, Cover, Seal	PPS, PC, EPDM	PPS, Stainless steel, PC, EPDM
Push in connector	(external Ø 6 mm or 1/4") or threaded ports G 1/8	
Integrated filter	0.1 mm (exchangeable)	0.1 mm (exchangeable)
Supply pressure	3-7 bar g	3-7 bar g
Accreditations	IP65/67, CE, (CSA pending)	IP65/67, CE, CSA (pending)
Ambient temperature	with pilot valve 0 °C to +55 °C without pilot valve -10 °C to +50 °C	0 °C to +55 °C
Protection class	IP65 and IP67 acc. to EN 60529	IP65 and IP67 acc. to EN 60529
Insulation class	3 acc. to VDE 0580	3 acc. to VDE 0580
Conformity	acc. to CE in compliance with EMV2004/108/EG	acc. to CE in compliance with EMV2004/108/EG

Options

8690

- Versions for double acting actuators

8691

- Versions for double acting actuators

Ordering Chart

Type 8690						
Electrical connection	**Position feedback**		**Control function pilot valve system**	**Pilot air ports**	**Item no. Actuator series ELEMENT Type 21xx**	**Item no. Actuator series CLASSIC Type 20xx**
Inductive proximity switch						
M12 connection	2 Inductive switches 24 V/DC PNP	open/ closed	single-acting (NO/NC)	Threaded ports G 1/8"	227 222	227 226
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	227 223	227 227
			double-acting (springless)	Push-in connector external Ø 6 mm or 1/4"	227 206	247 084
			none	Threaded ports G 1/8"	227 190	–
			none	Push-in connector external Ø 6 mm or 1/4"	227 191	–
			none	none	– #P_	227 193
	1 Inductive switch 24 V/DC PNP	open/ closed	single-acting (NO/NC)	Threaded ports G 1/8"	227 218	–
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	227 219	–
			double-acting (springless)	Push-in connector external Ø 6 mm or 1/4"	227 204	–
			none	Push-in connector external Ø 6 mm or 1/4"	227 187	–
			none	none	–	227 193
Cable gland	2 Inductive switches 24 V/DC PNP	open/ closed	single-acting (NO/NC)	Threaded ports G 1/8"	227 220	227 224
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	227 221	227 225
			double-acting (springless)	Push-in connector external Ø 6 mm or 1/4"	227 205	–
			double-acting (springless)	Threaded ports G 1/8"	–	227 207
			none	Threaded ports G 1/8"	227 189	–
			none	none	–	227 192
	1 Inductive switch 24 V/DC PNP	open/ closed	single-acting (NO/NC)	Threaded ports G 1/8"	227 216	–
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	227 217	245 356
			double-acting (springless)	Push-in connector external Ø 6 mm or 1/4"	227 203	–
			none	none	–	227 192
	2 Inductive switches NAMUR 2-wire 8 V/DC II 2G Ex ia IIC T6	open/ closed	single-acting (NO/NC)	Threaded ports G 1/8"	265 143	265 146
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	265 143	265 146
			double-acting (springless)	Threaded ports G 1/8"	265 144	265 147
			none	Threaded ports G 1/8"	265 142	–
			none	Push-in connector external Ø 6 mm or 1/4"	265 142	–
			none	none	–	265 145
	none	open/ closed	single-acting (NO/NC)	Threaded ports G 1/8"	225 883	–
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	227 215	225 231

Ordering Chart

Electrical connection	Position feedback		Controlfunction pilot valve system	Pilot air ports	Item no. Actuator series ELEMENT Type 21xx	Item no. Actuator series CLASSIC Type 20xx
Micro switch feedback						
M12 connection	2 micro switches	open/ closed	single-acting (NO/NC)	Threaded ports G 1/8"	227 234	227 238
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	227 235	227 239
			double-acting (springless)	Push-in connector external Ø 6 mm or 1/4"	227 212	–
			none	Push-in connector external Ø 6 mm or 1/4"	227 197	–
			none	none	–	227 200
	1 micro switch	open	single-acting (NO/NC)	Threaded ports G 1/8"	227 230	–
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	227 231	–
			double-acting (springless)	Push-in connector external Ø 6 mm or 1/4"	227 210	–
			none	Push-in connector external Ø 6 mm or 1/4"	227 194	–
			none	none	–	227 200
Cable gland	2 micro switches	open/ closed	single-acting (NO/NC)	Threaded ports G 1/8"	227 232	227 236
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	227 233	227 237
			double-acting (springless)	Threaded ports G 1/8"	–	227 213
			double-acting (springless)	Push-in connector external Ø 6 mm or 1/4"	227 211	–
			none	Threaded ports G 1/8"	227 195	–
			none	Push-in connector external Ø 6 mm or 1/4"	227 196	–
			none	none	–	227 198
	1 micro switch	open	single-acting (NO/NC)	Threaded ports G 1/8"	227 228	–
			single-acting (NO/NC)	Push-in connector external Ø 6 mm or 1/4"	227 229	–
			double-acting (springless)	Push-in connector external Ø 6 mm or 1/4"	227 209	–
			none	Threaded ports G 1/8"	233 344	–
			none	none	–	228 284

8691 (other versions on request)		
Type	**Item no. Cable Gland / AS-i Clip**	**Item no. M12**
Inductive	227 261	227 263
AS-Interface (Push-in 1/4")	227 259	227 256
DeviceNet (Push-in 1/4")	–	227 257

Accessories for Type 8690

Specifications	Actuator size	Control function	Item no.
Adapter kit ELEMENT Type 21xx	Ø70 / 90 / 130 mm	Universal	665 720
Adapter kit CLASSIC Type 20xx	Ø63 mm	Universal	673 262
		feedback (without pilot valve)	677 203
	Ø80 mm	Universal	673 263
		feedback (without pilot valve)	677 204
	Ø100 mm	Universal	673 264
		feedback (without pilot valve)	677 205
	Ø125 mm	Universal	674 513
		feedback (without pilot valve)	677 205

Accessories for Type 8690 / 8691

Specifications	Item no.
M12 socket, 8-pins, 2 m assembled cable	919 061
M12 socket, 8-pins, 5 m assembled cable	919 267
M12 socket, 4-pins, 5 m assembled cable	918 038
M12 socket, 5-pins, 2 m assembled cable	438 680
ASI fl at cable clip with stainless steel socket M12 (spare part)	799 646
Silencer with G 1/8"	780 779
Silencer with push-in connector	902 662

Accessories for Type 8691

Description	Actuator size	Control function	Item no.
Adapter kit ELEMENT Type 21xx	Ø 70 / 90 / 130 mm	universal	679 917
Adapter kit CLASSIC Types 20xx	Ø 63 mm	universal	679 921
		8691 feedback (without pilot valve)	679 937
	Ø 80 mm	universal	679 922
		8691 feedback (without pilot valve)	679 938
	Ø 100 mm	universal	679 923
		8691 feedback (without pilot valve)	679 939
	Ø 125 mm	universal	679 924
		8691 feedback (without pilot valve)	679 939
	Ø 175/225 mm	universal	679 925
		8691 feedback (without pilot valve)	679 940