

3.1 Indication

The valve control & indication are designed to provide easy and fully technical solutions in any process area. The requirements for total product flexibility and reliability, together with superior performance, are key functions for success within processing areas.



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The easy choice when indication is all you need

Alfa Laval IndiTop

Concept

IndiTop is a uniform indication unit that consists of a proven no-touch, set-and-forget sensor system with light-emitting diodes (LEDs) and valve control sensor board for connection to any PLC (Programming Logic Controller) system with digital interface.

IndiTop offers a solution for Alfa Laval butterfly and single-seat valves and is designed for use in the dairy, food and beverage, and biopharm industries; IndiTop provides real-time information about valve operating status 24/7 while helping to improve production performance and secure traceability.

Working principle

IndiTop is an automated indication unit which does not use any solenoid valve, it transmit status and condition of the valve position back to the PLC system using one of two electrical feedback signals. IndiTop fits onto all Alfa Laval hygienic actuators equipped with mushrooms. Installation is straightforward; no special expertise, adapters or tools are required. To initiate manual setup, simply press the push-button.

TECHNICAL DATA

Communication

Interface Digital PNP/NPN
Supply voltage 8-30 VDC/VAC

Sensor board

Max current consumption 45mA
Feedback signal #1 De-energized valve
Feedback signal #2 Energized valve
Valve tolerance band options 1
Default tolerance band ± 5 mm
Sensor accuracy ± 1 mm
Stroke length 0.1 - 80 mm



PHYSICAL DATA

Materials

Steel parts Stainless steel and Brass
Plastic parts Black Nylon PA 6, SEBS and POM

Environment

Working temperature -20 °C to +85 °C
Protection class IP66 and IP67

Cable connection

5 m option 6 wire, $\varnothing 5$ mm (AWG26)
10 m option 6 wire, $\varnothing 5$ mm (AWG26)
0,5 m with plug option M12 plug, incl. M12 socket

Note!

For further information: See also ESE00353

The ThinkTop has Patented Sensor System, Registered Design and Registered Trademark owned by Alfa Laval

Options

- Cable configuration

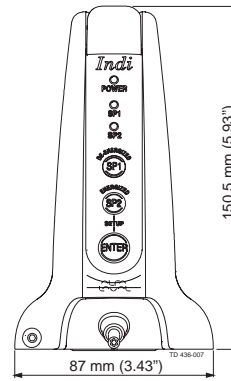
Accessories

- Threaded plate for indication pin on SRC, SMP-BC and i-SSV valves
- Adaptor for Unique SSSV valves

Compatible actuators

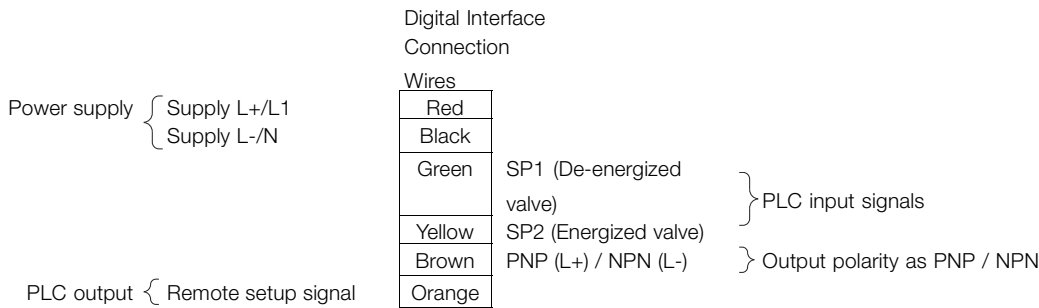
SBV	Yes	Unique SSV	Yes
Koltek	Yes	Unique SSV aseptic	Yes
LKLA-T	Yes	Unique SSV long stroke	No
ARC	Yes	SMP valves	Yes
SRC	Yes	Unique Mixproof	No
SRC long stroke	No		

Dimensions

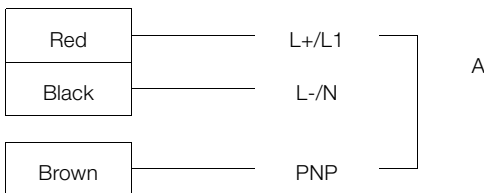


Electrical connection

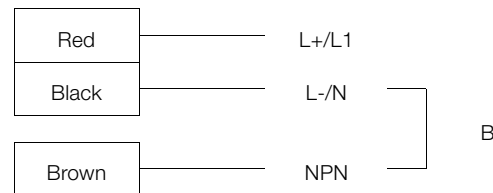
The fixed cable consists of 6 wires. For standard 2 feedbacks not using the remote setup features only 4 wires need to be connected to external systems (Red/Black/Green/Yellow). Brown is always connected to either Red (PNP) or Black (NPN) depending on whether PNP or NPN is required. The orange wire must be connected to Red if the remote setup feature is not used.



Connecting as PNP



Connecting as NPN

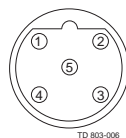


- A. Brown connected with Red wire on external screw terminals if PNP polarity
- B. Brown connected with Black wire on external screw terminals if NPN polarity

The fixed cable consists of 6 wires. For standard 2 feedback not using the remote setup feature only 4 wires need to be connected to external systems (Red/Black/Green/Yellow). Brown is always connected to either Red (PNP) or Black (NPN) depending on whether PNP or NPN is required. The orange wire must be connected to Red if the remote setup feature is not used.

Cable wire connections

Red	L+/L1
Black	L-/N
Green	SP1 (De-energized valve)
Yellow	SP2 (Energized valve)
Brown	PNP (L+) / NPN (L-)
	Remote setup signal
Orange	If not used - connect to L+/L1



M12 plug - PIN connections

PIN 1	Black	L-/N
PIN 2	Yellow	SP2 (Energized valve)
PIN 3	Green	SP1 (De-energized valve)
PIN 4	Red	L+/L1, 8-30V AC/DC
M12 Plug		PNP (L+) PIN 4
Internal wire connections	Brown	NPN (L-) PIN 1
PIN 5	Orange	Remote setup signal
		If not used - connect to L+/L1

When Indication is all you Need

Alfa Laval Indication Units for LKB/LKLA - Micro switch

Concept

The indication units from Alfa Laval are designed as a simple and easy to use, electrical feedback unit for Laval butterfly valves. The units are compatible with all major PLC (Programmable Logic Controller with PNP/NPN interface) and used in food, dairy and brewery installations and in biopharmaceutical applications.

Working principle

A micro switch is a so called sub-miniature switch. It is activated mechanically by a roller leaf. Standard function is normally open (NO), normally closed (NC) and is always a digital signal (on/off).



TECHNICAL DATA

Communication

Interface Digital, NO switch
 Supply voltage 24-55 (110) VDC/VAC
 Minimum load 100 mA
 Maximum load 1 A
 Electrical connection M12 plug, (incl counterpart)

"Note! As the unit is not earthed it should not be used for voltage exceeding 55 V"



PHYSICAL DATA

Materials

Steel parts Stainless steel and Brass
 Plastic parts PA6 and PPO/PS
 Seals Nitrile (NBR) rubber
 Contact pins Gold-plated

Environment

Working temperature -25°C to +80°C
 Protection rating IP 67

Cable connection

Counterpart M12 socket
 Termination Screw
 Max wire size 0.129 mm² (AWG26)
 Cable gland entry PG7 (3 - 6.5 mm)

Note!

Compatible brackets are available for the actuators and handles for LKB butterfly valves.

For further information: See also ESE001257.

Options

- Valve compatibility

Accessories

- Various cable options

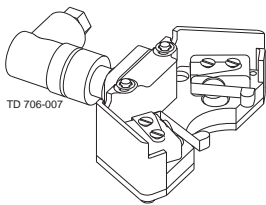
Compatible actuators

LKLA ø85	Yes
LKLA ø133	Yes

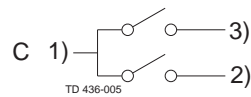
Compatible Valves

LKB	Yes
LKB-2	Yes

Electrical connection



- 3. ø3 closed valve
- 2. ø2 open valve



When Indication is all you Need

Alfa Laval Indication Units for LKB/LKLA - Inductive

Concept

The indication units from Alfa Laval are designed as a simple and easy to use, electrical feedback unit for Laval butterfly valves. The units are compatible with all major PLC (Programmable Logic Controller with PNP/NPN interface) and used in food, dairy and brewery installations and in biopharmaceutical applications.

Working principle

The inductive prox. switches are non-contact electronic switching elements. The output signal is always a digital signal (on/off).

These indication units are easily mounted without any further mechanical adjustments and have to be installed between the air operated actuator and the valve.



TECHNICAL DATA

Communication

Electrical design	DC PNP
Operating voltage	10...36 V DC
Output function	2 x NO
Current consumption	< 15 mA
Current rating	250 mA
Electrical connection	M12 plug



PHYSICAL DATA

Materials

Steel parts	Stainless steel
Plastic parts	PBT; PC (polycarbonate)
Contact pins	Gold-plated

Environment

Working temperature	-25 °C to +80 °C
Protection rating	IP 67

Note!

Compatible brackets are available for the actuators and handles for LKB butterfly valves.

The M12 counterpart (Socket) connector are not a part of the indication unit package. The wiring and pinout on the M12 plug has changed, compared to the previous side indication units for LKB/LKLA.

For further information: See also ESE001257

Options

- Valve compatibility

Accessories

- Various cable options

Compatible actuators

LKLA ø85	Yes
LKLA ø133	Yes

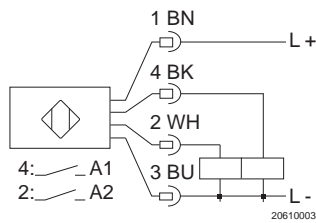
Compatible Valves

LKB	Yes
LKB-2	Yes

Electrical connection

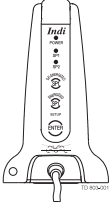
Standard M12 Connection

Pin	Setup
1	Supply +
4	Closed: OUT + 1 (A1)
2	Open: OUT + 2 (A2)
3	Supply -

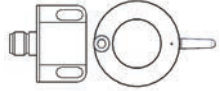
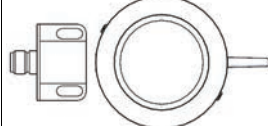


Top Unit
Product code: 5409

Valves: SRC, Unique SSV (Except SRC-LS and Unique SSV- LS), Unique SSV Aseptic, SMP-BC, SMP-SC, LKLA-T (LKB), Shutter valve, SBV.

Item No.	PPL EUR	Specification	Size		IndiTop
			DN/OD	DN	
9613418101	241	8 - 30 VDC/AC, 5 metres cable Load: Max.: 50 mA 2 Position Feedback Type: PNP/NPN	25-101.6	25-150	
9613418102	260	8 - 30 VDC/AC, 10 metres cable Load: Max.: 50 mA 2 Position Feedback Type: PNP/NPN	25-101.6	25-150	
9613418103	307	8 - 30 VDC/AC, 0.5 metres w/M12 plug, incl. plug counterpart Load: Max.: 50 mA 2 Position Feedback Type NPN	25-101.6	25-150	
9613418104	307	8 - 30 VDC/AC, 0.5 metres w/M12 plug, incl. plug counterpart Load: Max.: 50 mA 2 Position Feedback Type PNP	25-101.6	25-150	

Indication units for LKB/LKLA $\varnothing 85$ /Handle 1.1
 Indication units for LKB/LKLA $\varnothing 133$
 Product code: 5415

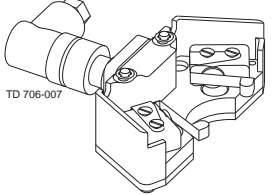
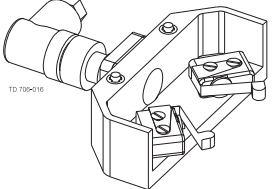
Item No.	PPL EUR	Specification	Size		24 VDC Digital interface
		Inductive Side indication	LKB for DN/OD	LKB-2 for DN	
9611995750	274	Indication unit w/M12 plug for LKB/LKLA $\varnothing 85$	25 - 101.6	25 - 100 125 - 150	
9611995748	345	Indication unit w/M12 plug for LKB/LKLA $\varnothing 133$	101.6	100 - 150	

Note!

The M12 counterpart (socket) connector are not a part of the indication unit package

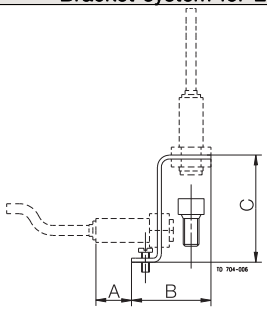
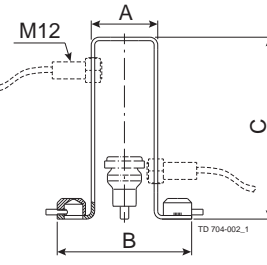
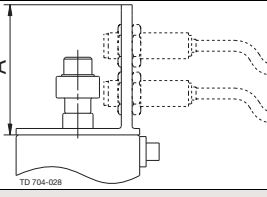
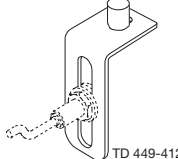
The wiring and pinout on the M12 plug has changed, compared to the previous inductive side indication units for LKB/LKLA.

Indication Units for LKLA (LKB) $\varnothing 85$ /Handle 2.1
 Indication Units for LKLA (LKB) $\varnothing 133$
 Product code: 5415

Item No.	PPL EUR	Specification	Size			Micro switch unit* for LKLA $\varnothing 85$
			LKB for DN/OD	LKB for DN/OD	LKB-2 for DN	
9612510702	212	24-55 (110) VDC/VAC Load: Min. 100 mA Max. 1A Signal output: On/off, digital	25-101.6	1"-4"	25-100	 TD 706-007
* NOTE! The micro switch units are not earthed and should therefore not be used for voltage above 55 V.						
Micro switch unit* for LKLA $\varnothing 133$						
9612510902	286	Signal output: On/off, digital 24-55 (110) VDC/VAC Load: Min. 100 mA Max. 1A	101.6	4"	100-150	 TD 706-016
* NOTE! The micro switch units are not earthed and should therefore not be used for voltage above 55 V.						

For further information - please see PD-sheet.

Indication Units
 Product code: 5414

Item No.	PPL EUR	Specification	Valve type/size	Dimension (mm)			Image
				A	B	C	
							Bracket system for LKAP
9612498901	145	Without M12 sensor		15	25	54	
							Bracket system for Unique SSV, Unique Mixproof, SMP-SC, SMP-BC, SMP-BCA, LKLA-T (LKB), Shutter valve, SBV
9612411202 9612411203	108	Without M12 sensor Without M12 sensor	SSV-LS 76-101.6 mm/DN80-DN100 SSV-Y 76-101.6 mm SSV with high pressure actuator 76-101.6 mm/DN80-100	47 47	95 95	128.5 162.5	
							Bracket system for Unique SSSV size 12.7-19.0 mm
9612947703	145	Without M12 sensor		60			
							Bracket system for external sensor on Unique Mixproof
9613095503	99	Without M12 sensor	Unique Mixproof 38-101.6 mm DN 40-150 Sch. 5 2"-6"				

Suitable sensors are found in the price lists - Inductive sensors

Indication Units

For: Unique SSV, Unique SSV-LS, Unique SSV Aseptic, SMP-SC, SMP-BC, SMP-BCA, LKLA-T (LKB), Shutter valve, SBV, Unique and SSSV
Product code: 5414

Item No	PPL EUR	Supply	Interface	Connection	Operation	Type	Bracket systems	Wiring
Inductive sensor (M12)								
9611995195	49	8 VDC NAMUR	NC, Connection to safe circuit (Zener barrier)	2m cable	2 wire	NF5003 Ex protection II 1G/1D Ex ia IIC T6	See Note 1	
Inductive sensor (M12)								
9611995196	46	8 VDC NAMUR	NC, Connection to safe circuit (Zener barrier)	M12 plug	2 wire	NF501A Ex protection II 2G/1D Ex ia IIC T6	See Note 1	
Inductive sensor (M12)								
9611992900	52	10-36 VDC	NO, PNP/NPN	2m cable	2 wire	IF5718	See Note 1	
Inductive sensor M12 (Mixproof valve - Upper seat-push)								
9611995197	59	10-30 VDC	NO, PNP/NPN	1m cable	3 wire	IFT249 Bracket mounted Balanced or Unbalanced Mixproof valve	See Note 3	
Inductive sensor M12 (Mixproof valve - Upper seat-push)								
9611995198	72	10-30 VDC	NO, PNP/NPN	6m	3 wire	IFT213 Bracket mounted Balanced or Unbalanced Mixproof valve	See Note 3	

Suitable brackets are found in the price lists - Brackets

Connections cable with M8 and M12 socket are found in the price lists - Accessories

Indication Units

For: Unique SSV, Unique SSV-LS, Unique SSV Aseptic, SMP-SC, SMP-BC, SMP-BCA, LKLA-T (LKB), Shutter valve, SBV, Unique and SSSV
 Product code: 5414

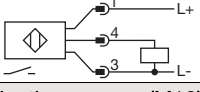
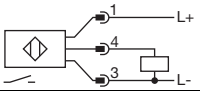
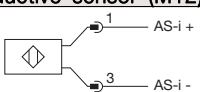
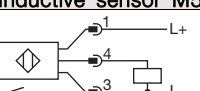
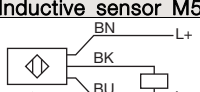
Item No	PPL EUR	Supply	Interface	Connection	Operation	Type	Bracket systems	Wiring
Inductive sensor M12 (Mixproof valve - Upper seat-push)								
9611995199	53	10-30 VDC	NO, PNP	M12 plug	3 wire	IFT216 Bracket mounted Balanced or Unbalanced Mixproof valve	See Note 3	
						IFT216 Yoke mounted Unbalanced CP3 Mixproof valve	See Note 4	
Inductive sensor M12 (Mixproof valve - Upper seat-push)								
9611995770	71	10-36 VDC	NC, PNP	M12 plug	3 wire	IFT204 Yoke mounted Balanced CP3/PMO Mixproof valve	See Note 4	

Suitable brackets are found in the price lists - Brackets

Connections cable with M8 and M12 socket are found in the price lists - Accessories

Indication Units

For: Unique SSV, Unique SSV-LS, Unique SSV Aseptic, SMP-SC, SMP-BC, SMP-BCA, LKLA-T (LKB), Shutter valve, SBV, Unique and SSSV
Product code: 5414

Item No	PPL EUR	Supply	Interface	Connection	Operation	Type	Bracket systems	Wiring
Inductive sensor (M12)								
9611995200	53	10-36 VDC	NO, PNP	M12 plug	3 wire	IFT203	See Note 1	
Inductive sensor (M18)								
9611995201	70	10-36 VDC	NO, PNP	M12 plug	3 wire	IGT203	See Note 2	
Inductive sensor (M12)								
9611995202	86	AS-Interface	AS-I 2.1, 62 node	M12 plug	2 wire	IFC247	See Note 1	
Inductive sensor M5								
9611995650	115	10-36VDC	NO, PNP	M8 plug	3 wire	IY5036	See Note 5	
Inductive sensor M5								
9611995651	137	10-36VDC	NO, PNP	2m cable	3 wire	IY5046	See Note 5	

Suitable brackets are found in the price lists - Brackets

Connections cable with M8 and M12 socket are found in the price lists - Accessories

Inductive sensor which is compatible with the following bracket systems:

Note 1: 9612552901 LKLA ø133
 9611417764 LKLA ø85
 9611417767 LKLA ø85
 9612498901 LKAP
 961264-7527 SBV
 9612411202 Unique SSV, SRC, ARC, SMP-SC, SMP-BC, SMP-BCA, LKLA-T(LKB), Kolttek, SBV
 9612947703 Unique SSSV

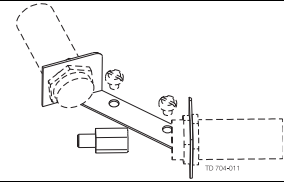
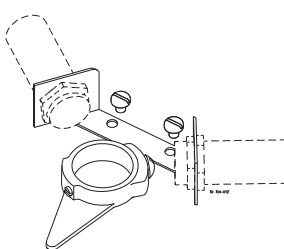
Note 2: 9612552902 LKLA ø133
 9611417765 LKLA ø85
 9611417768 LKLA ø85

Note 3: **Applies for Unique Mixproof valves:**
 9613095503 Sensor bracket, ø12
 9611993603 ThinkTop cable gland PG7, for ext. Sensor
 If sensor with plug - then use 9611995205 EVT004 Sensor cable 5 m, 4 wire with angled socket connector

Note 4: **Applies for Unique CP3 and PMO Mixproof valves**
 9611993603 ThinkTop cable gland PG7, for ext. Sensor
 9611995205 EVT004 Sensor cable 5 m, 4 wire with angled socket connector




Note 5: **Applies for Unique Sample valve**
 Jumper cable M8 socket to M12 plug are applied on M5 sensor IY5036
 9614017401 Adapter for M5 sensor IY5036 and IY5046 (Open valve position only) - Size 4 and 10
 9614257901 Adapter for M5 sensor IY5036 and IY5046 (Open valve position only) - Size 25

Indication Units
 For LKLA (LKB) $\varnothing 85/\varnothing 133$
 Product code: 5414


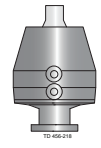
Item No.	PPL EUR	Size		Specification	
		LKB for DN/OD	LKB-2 for DN		
Bracket system for LKLA $\varnothing 133$					
9612552901	43	101.6	100-150	$\varnothing 12$	
9612552902	43	101.6	100-150	$\varnothing 18$	
** NOTE! Sold before 890601 - LKB 101.6: $\square = 10$ mm.					
Bracket system for LKLA $\varnothing 85$					
9611417764	43	25-101.6	25-100	$\varnothing 12$	
9611417767	78		125-150	$\varnothing 12$	
9611417765	43	25-101.6	25-100	$\varnothing 18$	
9611417768	78	125-150	125-150	$\varnothing 18$	


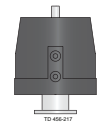
Suitable sensors are found in the price lists - Inductive sensors
 Please see mounting brackets for actuators, handles and LKB valves.
 Please see mounting brackets for other valves.


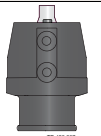
Product code: 5417


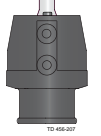
Accessories	Stroke Limiter	ER 55	8697
Sensing & Control Diaphragm valves			
Valve			
Unit size (HxW)	65x23 mm	75x67 mm	110x70 mm
Automation			
Positioner with display			
Positioner without display			
Control unit			
Indication unit		✓	✓
Electrical ATEX unit			✓
Supply Voltage			
8 VDC			✓
24 VDC		✓	✓
24 VAC		✓	
250 VAC		✓	
Number of Solenoid valve			
One (1) pilot valve, Single acting			
Two (2) pilot valve, Double acting			
Feedback signal			
Optical Indication	✓		✓
Open and Close			✓
Open		✓	
Close		✓	
Sensor & Interface			
Contactless			
Reed-Contact		✓	
Micro-switch			
Inductive sensor			✓
NAMUR sensor EEx ia			✓
PNP			✓
NPN			
Digital Interface		✓	✓
AS-Interface v3.0, Max 62 node			
DeviceNet, Max 63 node			
Analogue interface 4-20 mA			
Mechanical - Manual override	✓		
Cable connection			
PG gland		✓	✓
M12 Plug, 4 pin - AS-Interface			
M12 Plug, 5 pin - DeviceNet			
M12 Plug, 8 pin - Digital Interface			
Protection			
Class IP65		✓	✓
Class IP67			✓

Product code 5417

Diaphragm Actuator Stainless steel/Stainless steel						Stroke Limiter				
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H65xW23	Position feedback	Inter-face	SS/SS	
9614092101	28	NC NO AA	DN 8	1	EPDM		Open or Close Manual override	None		
9614092103	33		DN 15	2						PTFE
			DN 20							
9614092107	39		DN 25	3	EPDM					PTFE
9614092110	51		DN 40	5						
		DN 50								


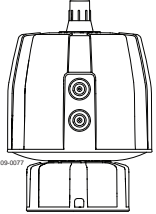
Diaphragm Actuator Composite/Stainless steel						Stroke Limiter				
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H65xW23	Position feedback	Inter-face	C/SS	
9614092101	28	NC NO AA	DN 8	1	EPDM		Open or Close Manual override	None		
9614092103	33		DN 15		EPDM					PTFE
			DN 20							
9614092107	39		DN 25	3	EPDM					PTFE
9614092110	51		DN 40	5						
			DN 50							
9614092112	100		DN 65	6	EPDM					PTFE
			DN 80	7						



Diaphragm Actuator Composite/Composite						Stroke Limiter							
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H65 x W23	Position feedback	Inter-face	C/C				
9614092101	28	NO	DN 15	1	EPDM		Open or Close Manual override	None					
9614092103	33		DN 20	2	EPDM								
			DN 25										
9614092108	45		DN 40	4	EPDM					Single acting	Open or Close Manual override	None	
			DN 50		EDPM								

Diaphragm Actuator Composite/Composite						Stroke Limiter				
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H65 x W23	Position feedback	Inter-face	C/C	
9614092101	28	NC *AA	DN 15	1	EPDM		Open or Close Manual override	None		
9614092103	33		DN 20	2	EPDM					PTFE
			DN 25							
9614092107	39		DN 25	3	EPDM					PTFE
9614092108	45		DN 40	4						
9614092110	51		DN 40	5						
9614092108	45		DN 50	4						
9614092110	51		DN 50	5	EDPM					


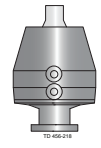
Note: * AA actuator only available with EPDM



Product code 5417


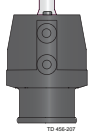
Diaphragm Actuator Composite/Composite						Stroke Limiter				
Item No.	PPL EUR	Function	Valve	Size	Elastomer		H65xW23	Limiter position	Inter- face	DV-P
9614092101	28	NO AA	DN 15	1	EPDM	PTFE		Open or Close Manual override	None	
9614092103	33		DN 20	2						
			DN 25							
9614092108	45		DN 40	4	EPDM	PTFE		Single Double Acting	Open or Close Manual override	
		DN 50								


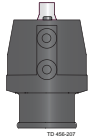
Diaphragm Actuator Composite/Composite						Stroke Limiter				
Item No.	PPL EUR	Function	Valve	Size	Elastomer		H65xW23	Limiter position	Inter- face	DV-P
9614092101	28	NC	DN 15	1	EPDM	PTFE		Open or Close Manual override	None	
9614092103	33		DN 20	2	EPDM					
9614092107	39		DN 25		3	PTFE				
9614092108	45		DN 40	4	EPDM					
9614092110	51		DN 40	5	PTFE					
9614092108	45		DN 50	4	EPDM					
9614092110	51		DN 50	5	PTFE					
								Single Double Acting	Open or Close Manual override	

Product code 5417

Diaphragm Actuator Stainless steel/Stainless steel						Indication unit ER55				
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H75xW67	Position feedback	Interface	SS/SS	
9614092201	97	NC	DN 8	1	EPDM	PTFE		Open or Close	Reed-Contact 24VDC 250VAC	
			DN 15	2						
		NO AA	DN20	2	EPDM	PTFE				
			DN 25	3						
			DN 40	5						
DN 50										

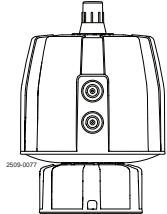
Diaphragm Actuator Composite/Stainless steel						Indication unit ER55				
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H75 x W67	Position feedback	Interface	C/SS	
9614092201	97	NC NO AA	DN 8	1	EPDM	PTFE		Open or Close	Reed-Contact 24VDC 250VAC	
			DN 15							
			DN 20	2	EPDM	PTFE				
			DN 25	3	EPDM	PTFE				
			DN 40							
DN 50	5	EPDM	PTFE							
9614092202	108		DN 65	6	EPDM	PTFE	Open or Close	Reed-Contact 24VDC 250VAC		
		DN 80	7							

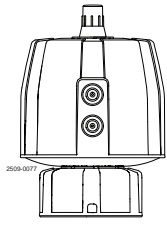
Diaphragm Actuator Composite/Composite						Indication unit ER55				
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H75 x W67	Position feedback	Interface	C/C	
9614092201	97	NO	DN 15	1	EPDM			Open or Close	Reed-Contact 24VDC 250VAC	
			DN 20							
			DN 25	2	EPDM					
			DN 40	4	EPDM					
			DN 50							

Diaphragm Actuator Composite/Composite						Indication unit ER55				
Item No.	PPL EUR	Function	Valves	Size	Elastomer	H75 x W67	Position feedback	Interface	C/C	
9614092201	97	NC *AA	DN 15	1	EPDM		Open or Close	Reed-Contact 24VDC 250VAC		
			DN 20	2	EPDM					PTFE
			DN 25							
				3						PTFE
			DN 40	4	EPDM					
				5						PTFE
			DN 50	4	EDPM					
	5		PTFE							

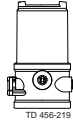
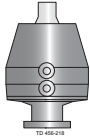
Note: * AA actuator only available with EPDM

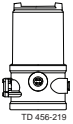
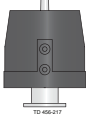
Product code 5417

Diaphragm Actuator Composite/Composite						Indication unit ER55				
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H75xW67	Position feedback	Interface	DV-P	
9614092201	97	NO AA	DN 15	1	EPDM	PTFE	Single Double Acting	Open or Close	Reed- Contact 24VDC 250VAC	
			DN 20	2						
			DN 25							
			DN 40	4	EPDM	PTFE				
			DN 50							

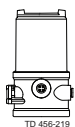
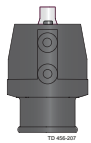
Diaphragm Actuator Composite/Composite						Indication unit ER55				
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H75xW67	Position feedback	Interface	DV-P	
9614092201	97	NC	DN 15	1	EPDM	Single Double Acting	Open or Close	Reed- Contact 24VDC 250VAC		
			DN 20	2	EPDM					PTFE
			DN 25							
			DN 40	3						PTFE
			DN 40	4	EPDM					
			DN 40	5						PTFE
			DN 50	4	EPDM					
			DN 50	5						PTFE

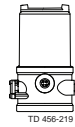
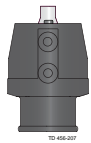
Product code: 5417

Diaphragm Actuator Stainless Steel/Stainless Steel						Indication unit 8697					
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H87xW66	Position feedback	Interface	SS/SS		
9614450601	283	NC NO AA	DN 8	1	EPDM	 Single Double Acting	Open and Close	Inductive sensor 24VDC			
9614450602	283		DN 15	2						PTFE	
9614450606	299		DN 20	1	EPDM		PTFE	Open and Close			NAMUR sensor 8VDC
9614450607	299		DN 8								
9614450603	283		DN 15	2	EPDM		PTFE	Open and Close		Inductive sensor 24VDC	
9614450605	283		DN 20								
9614450608	299		DN 25	3	EPDM		PTFE	Open and Close		NAMUR sensor 8VDC	
9614450610	299		DN 40								
				DN 50	5						

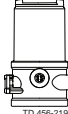
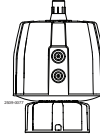
Diaphragm Actuator Composite/Stainless Steel						Indication unit 8697					
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H87xW66	Position feedback	Interface	C/SS		
9614450601	283	NC NO AA	DN 8	1	EPDM	 Single Double Acting	Open and Close	Inductive sensor 24VDC			
9614450602	283		DN 15							2	EPDM
9614450606	299		DN 20	1	EPDM		PTFE	Open and Close			
9614450607	299		DN 8								
9614450603	283		DN 15	2	EPDM		PTFE	Open and Close		Inductive sensor 24VDC	
9614450605	283		DN 20								
9614450608	299		DN 25	3	EPDM		PTFE	Open and Close		NAMUR sensor 8VDC	
9614450610	299		DN 40								
				DN 50	5						

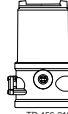

Product code: 5417

Diaphragm Actuator Composite/Composite						Indication unit 8697			
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H87xW66	Position feedback	Interface	C/C
9614450601	283	NO	DN 15	1	EPDM	 TD 456-219 Single Acting	Open and Close	Inductive sensor 24VDC	 TD 456-207
9614450602	283		DN 20	2	EPDM				
			DN 25						
9614450606	299		DN 15	1	EPDM				
9614450607	299		DN 20	2	EPDM				
			DN 25						
9614450604	283		DN 40	4	EPDM				
			DN 50		EPDM				
9614450609	299	DN 40	4	EPDM					
		DN 50		EPDM					

Diaphragm Actuator Composite/Composite						Indication unit 8697			
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H87xW66	Position feedback	Interface	C/C
9614450601	283	NC *AA	DN 15	1	EPDM	 TD 456-219 Single Double Acting	Open and Close	Inductive sensor 24VDC	 TD 456-207
9614450602	283		DN 20	2	EPDM				
			DN 25						
9614450606	299		DN 15	1	EPDM				
9614450607	299		DN 20	2	EPDM		PTFE		
			DN 25						
9614450603	283		DN 25	3			PTFE		
9614450604	283		DN 40	4	EPDM				
9614450605	283		DN 40		5			PTFE	
9614450604	283		DN 50	4	EPDM				
9614450605	283		DN 50		5			PTFE	
9614450608	299		DN 25	3			PTFE		
9614450609	299		DN 40	4	EPDM				
9614450610	299		DN 40		5			PTFE	
9614450609	299		DN 50	4	EPDM				
9614450610	299		DN 50		5			PTFE	

Product code: 5417

Diaphragm Actuator Composite/Composite						Indication unit 8697					
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H87xW66	Position feedback	Interface	DV-P		
9614450601	283	NO AA	DN 15	1	EPDM	PTFE	 TD 456-219	Open and Close	Inductive sensor 24VDC		
9614450602	283		DN 20	2							
			DN 25								
9614450606	299		DN 15	1	EPDM	PTFE		Single	Open and Close		NAMUR sensor 8VDC
9614450607	299		DN 20	2							
			DN 25								
9614450604	283		DN 40	4	EPDM	PTFE		Double	Open and Close		Inductive sensor 24VDC
			DN 50	4							
9614450609	299		DN 40								
		DN 50		Acting	Open and Close	NAMUR sensor 8VDC					

Diaphragm Actuator Composite/Composite						Indication unit 8697							
Item No.	PPL EUR	Function	Valve	Size	Elastomer	H87xW66	Position feedback	Interface	DV-P				
9614450601	283	NC	DN 15	1	EPDM	 TD 456-219	Open and Close	Inductive sensor 24VDC					
9614450602	283		DN 20	2	EPDM					PTFE			
			DN 25										
9614450606	299		DN 15	1	EPDM					PTFE	Open and Close	NAMUR sensor 8VDC	
9614450607	299		DN 20	2									
			DN 25										
9614450603	283		DN 25	3						PTFE	Single	Open and Close	Inductive sensor 24VDC
9614450604	283		DN 40	4	EPDM					PTFE			
9614450605	283		DN 40	5									
9614450604	283		DN 50	4	EPDM					PTFE	Double	Open and Close	Inductive sensor 24VDC
9614450605	283		DN 50	5									
9614450608	299		DN 25	3									
9614450609	299		DN 40	4	EPDM					PTFE	Acting	Open and Close	NAMUR sensor 8VDC
9614450610	299		DN 40	5									
9614450609	299		DN 50	4	EPDM								
9614450610	299		DN 50	5									