FLOWSERVE

XCL Series Switchbox

Product
Information

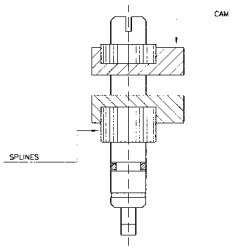
Experience In Motion

FLOWSERVE

A. *Tool-free adjustment*
B. *Pre-wired terminal strip*
C. *Dual 3/4 NPT or M25x1,5 conduit entries*

Features

Quick-set cams



Tool free adjustment of switch trip is accomplished simply by pushing or pulling the cam and rotating it to the new position. Cams are spring-loaded and splined to maintain switch setting in any installed position.

Limit switches

Multiple options available:
Electromechanical, Amplified proximity,
Namur proximity, SPDT, DPDT.
Up to 4 pcs possible.

Cable entries

Dual 3/4 NPT (XCL) or M25x1,5 (XML) conduit entries as standard.

Terminal strip

Pre-wired, multi-point terminal strip with extra strip as standard for optional solenoid valve.

Position indicator

Bolt-on Dome indicator for high contrast wide angle viewing. A flat lid without indicator is also available.

Captive Cover Screws

Permit calibration without potential for losing screws.

Watertight protection

IEC 529 IP67 / NEMA 4X

ATEX approved

Explosion proof ATEX II 2 G Ex EEx d IIB T5

CSA approved

Div.1, Cl.1, Group C-D, Div.1, Cl.2, Group E-G

XCL series switchbox is designed to be directly and easily mounted onto actuators having connections according to Namur VDI/VDE 3845, in order to reduce switchbox/actuator mounting time.

4–20 mA Transmitter

2 x SPDT switches Type M1

2 x SPDT Sabre Switch

Switch Options

Switch Option	Manufacturer	Part Number	Load Capacity
M1 - SPDT Mechanical	Honeywell MicroSwitch	V7-1C13D8-201	15 A (1/2 HP) at 125 V AC/ 0,5 A at 125 V DC
MG - SPDT Gold Mechanical	Honeywell MicroSwitch	V7-1D11D8-201	1 A at 125 V AC/ 50 mA at 24 V DC
M3 - DPDT Mechanical	Cherry	E19-00A	15 A (3/4 HP) at 125 V AC
MB - DPDT Mechanical	Licon	22-104	10 A (1/2 HP) at 125 V AC
P4 - SPST Proximity	Aleph	PS-6132	0.35 A at 140 V AC / 1 A at 50 V DC (50 W Max.)
P5 - SPDT Proximity	Hamlin	59135-030	0.25 A at 120 V AC / 0.25 A at 28 V DC (3 W Max.)
PE - SPDT Sabre Proximity	Flowserve	XA0199	1 A at 120 V AC / 1 A at 24 V DC (25 W Max.)
PP - SPDT Phazer Proximity	Flowserve	XA0155	3 A at 120 V AC / 2 A at 24 V DC (100 W Max.)
PT - SPST BRS Proximity	Flowserve	XA0157	3 A at 120 V AC / 0.5 A at 24 V DC
N8 - Solid State Proximity	Pepperl + Fuchs	NJ2-V3-N	NAMUR Sensor Output / 5–25 V DC Supply Load Current <1 mA (w/Target) / > 3 mA w/out Target
NP- Solid State Proximity	Pepperl + Fuchs	SJ3.5-N	
NQ - Solid State Proximity	Pepperl + Fuchs	NJ4-12GK-N	
NR - Solid State Proximity	Pepperl + Fuchs	NJ4-12GM40-E1	PNP Sinking / 200 mA max. Current / 10–60 V DC
NS - Solid State Proximity	Pepperl + Fuchs	NJ4-12GM40-E2	NPN Sourcing / 200 mA max. Current / 10–60 V DC
NJ - Solid State Proximity1	IFM Efector	IN-2002-ABOA	0.35 A at 250 V AC / 0.1 A at 250 V DC
NU - SPDT GO Proximity	GO	35-13319-A1A	4 A at 120 V AC / 3 A at 24 V DC

ATEX

XCL series switchbox is ATEX approved. Explosion proof ATEX II 2 G Ex EExd IIB T5 and can be installed in hazardous areas.

CSA

Div.1, Cl.1, Group C–D, Div.1, Cl.2, Group E–G.

Materials

Cam shaft: AISI 304
Housing: Aluminium, powder coated
Screws, washers, springs, rings: AISI 303
Dome Indicator: Polycarbonate
Label: Polyester

AS-Interface (AS-i)

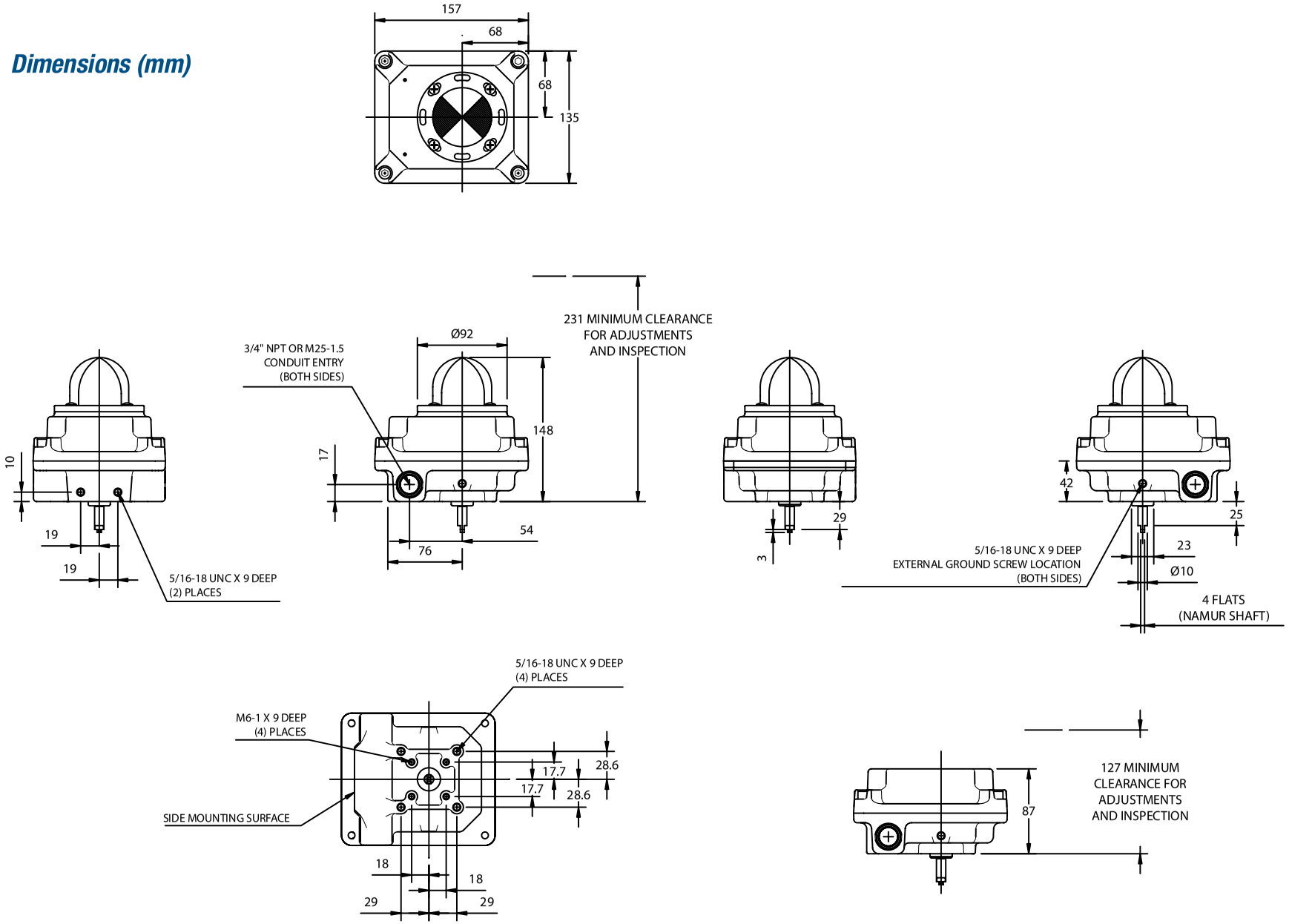
XCL series can be equiped with optional AS-i communication capabilities. This technology offers a very simple, flexible and cost effective network system.

XCL Series Coding

Brand sticker	P	PMV
Shaft	N	Namur VDI/VDE 3845
Connections (cable entry)	XCL	2 x 3/4 NPT
	XML	2 x M25 x 1,5
Indicator option	1	Flat cover without indicator
	U	Dome, Red/Green
Qty of switches	0	0 switches
	1	1 switch
	2	2 switches
	4	4 switches
Switch options	M1	SPDT Mechanical switches 250VAC 10A
	MG	SPDT Mechanical switches gold plated
	M3	DPDT Mechanical Cherry
	MB	DPDT Mechanical Licon
	P4	SPST proximity
	P5	SPDT proximity
	PE	Sabre SPDT proximity
	PP	Phazer II SPDT proximity
	PT	BRS SPST Phazer II proximity
	N8	P+F NJ2 V3 N (Namur)
	NQ	P+F NJ4-12GK-N (Namur)
	NR	P+F 12GM40-E1 (3 wire NPN NO)
	NS	P+F 12GM40-E2 (3 wire PNP NO)
	NP	P+F SJ 3,5-N (Namur)
	NJ	IFM IN -2002-ABOA
	NU	GO proximity 35-13319-A1A
	FZ	AS-i controller card 2,0 incl. 2 proximity switches
Certificate	14	General Purpose
	18	ATEX II 2 G EEx d IIB T5 / CSA Div.1, Cl.1, GRP CD
Analog Output	0	None
	T	4-20 mA transmitter
	D	180 deg 4-20 mA transmitter
	A	0-1k Ohm Pot
	B	0-5k Ohm Pot
	C	0-10k Ohm Pot
Wiring options	0	None
Minimun extra terminals	2	2 (standard)
	4	4 (Optional)
	6	6 (Optional, not possible for all switch options)
Acessories	0	None
	L	Cover bolts lubricated with grease
	P	180' Pot (for analog options: A, B, C)
	V	Viton O-rings
Housing/Surface treatment	0	Black polyester powder coat

Example
PNXCLU2M1-1800-200

Dimensions (mm)



p/n: FCD PMENBR0010-02

Hazardous Locations

ATEX II 2 G Ex EEx d IIB T5
ATEX Demko 04 Atex 0416173
Div.1, Class 1, Group C,D

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