

## INCREASE SAFETY

# Push Button Stations EFXE Series - AISI316L



Push button stations EFXE Series, made of stainless steel AISI316L, are manufactured by using enclosures AQ../AR.. Series.

They are designed to meet the requirements for use ON and OFF-SHORE, in petrochemical and marine applications and for any other industry where an explosive atmosphere may be present.

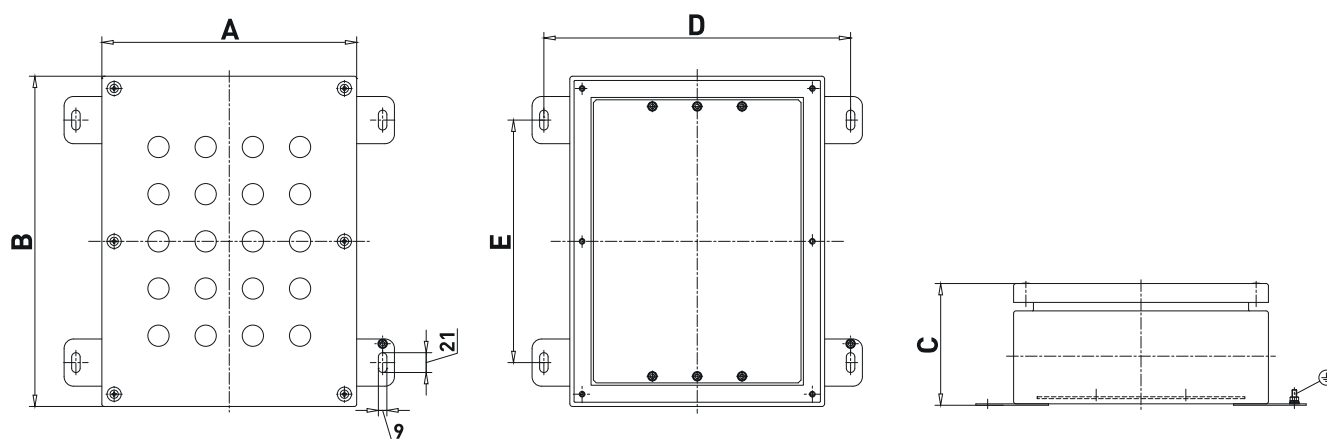
They can be equipped with following Ex-de certified components:

- Standard and emergency push buttons,
- Rotating switches,
- Signalling lamps,
- Measurement instruments.

## TECHNICAL FEATURES

<b>Material</b>	Stainless steel AISI-316L
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C
<b>Approvals</b>	IMQ 08 ATEX 028X GOST R
<b>Marking</b>	II 2 GD Ex-de IIC T(**) Gb / Ex-mb IIC T(**) Gb Ex-tb IIIC T(**) Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Surface treatment</b>	Acid treatment
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory
<b>Accessories available upon request</b>	Electropolish treatment Side gland plates Hinges Drain/breather valve Traffolyte/Stinless steel certificate label Internal mounting plate Locking facility Passing through earth bolt

## Dimensions EFXE



## EFXE Series - Stainless steel push button stations

TYPE	DIMENSIONS [mm]					WEIGHT [kg]
	A	B	C	D	E	
EFXE-2727	270	270	130	325	177	4,5
EFXE-3535	350	350	160	405	257	5,6
EFXE-1320	137	200	130	192	-	4
EFXE-2027	200	270	130	255	177	7
EFXE-2735	270	350	130	325	257	9,5
EFXE-3550	350	500	160	405	407	13
EFXE-5050	500	500	160	555	407	14,5

\* For complete push button stations is necessary to ask to the Sales Office.

## Maximum number of entries on sides and cover

TYPE	EFXE-2727		EFXE-3535		EFXE-1320		EFXE-2027		EFXE-2735		EFXE-3550		EFXE-5050	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
M20 / 1/2"	12	12	24	24	6	10	10	12	12	16	24	36	36	36
M25 / 3/4"	10	10	14	14	4	8	8	10	10	14	14	20	20	20
M32 / 1"	4	4	12	12	2	3	3	4	4	6	12	18	18	18
M40 / 1" 1/4	4	4	5	5	2	3	3	4	4	5	5	7	7	7
M50 / 1" 1/2	3	3	4	4	1	2	2	3	3	4	4	6	6	6
M63 / 2"	3	3	3	3	1	2	2	3	3	3	3	5	5	5
M75 / 2" 1/2	-	-	3	3	-	-	-	-	-	-	3	4	4	2
M80 / 3"	-	-	2	2	-	-	-	-	-	-	4	4	4	4
COVER ENTRIES	16		25		6		12		20		40		64	

## INCREASE SAFETY

# Push Button Stations EFXE Series - Aluminium



Push button stations EFXE Series, made of aluminium with low content of copper, are manufactured by using aluminium enclosures AQ../AR.. Series.

They are designed to meet the requirements for use ON and OFF-SHORE, in petrochemical and marine applications and for any other industry where an explosive atmosphere may be present.

They can be equipped with following Ex-de certified components:

- Standard and emergency push buttons;
- Rotating switches;
- Signalling lamps;
- Measurement instruments.

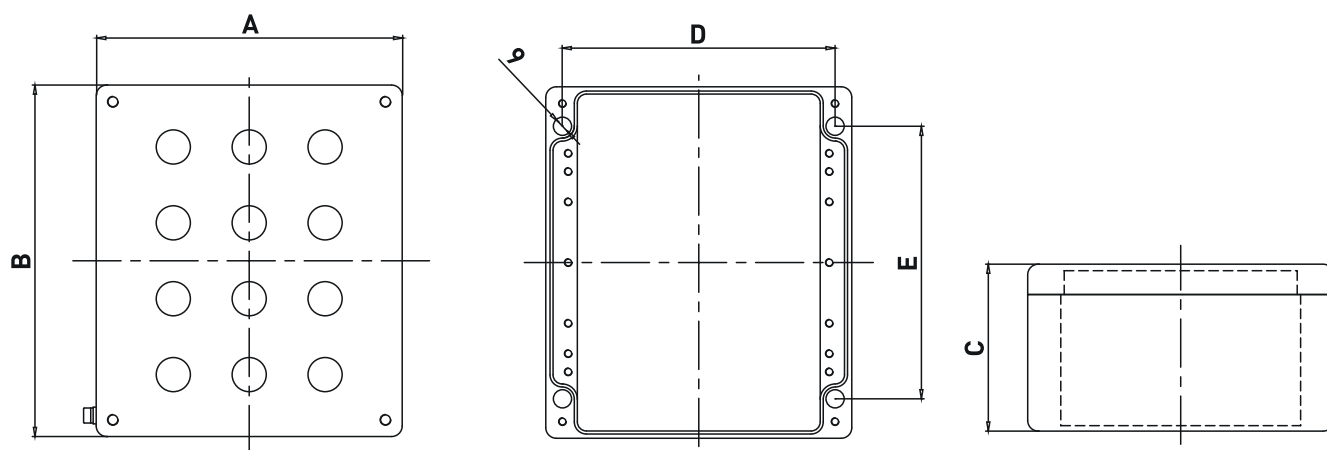
## TECHNICAL FEATURES

<b>Material</b>	Aluminium with low content of copper
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C
<b>Approvals</b>	IMQ 08 ATEX 028X GOST R
<b>Marking</b>	II 2 GD Ex-de IIC T(**) Gb / Ex-mb IIC T(**) Gb Ex-tb IIIC T(**) Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Surface treatment</b>	Standard with polyester powder coating RAL 7001
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Hinges Drain/breather valve Traffolyte/Stinless steel certificate label Internal mounting plate Passing through earth bolt

### EFXE Series - Aluminium push button stations

TYPE	DIMENSIONS					WEIGHT [kg]
	A	B	C	E	F	
EFXE-0808	80	75	57	52	63	0,28
EFXE-0818	80	175	57	52	163	0,53
EFXE-0825	80	250	52	52	238	0,71
EFXE-1010	100	100	80	66	86	0,6
EFXE-1016	100	160	80	66	146	0,8
EFXE-1020	100	200	80	66	186	0,95
EFXE-1212	120	122	90	82	106	0,92
EFXE-1222	120	220	90	82	204	1,41
EFXE-1236	120	360	80	82	344	1,95
EFXE-1414	140	140	90	93	120	1,5
EFXE-1420	140	200	90	93	180	1,63
EFXE-1616	160	160	90	110	140	1,48
EFXE-1626	160	260	90	110	240	2,01
EFXE-1636	160	360	90	110	340	2,52
EFXE-1656	160	560	90	110	540	3,74
EFXE-1818	180	180	100	130	160	2,25

## Dimensions EFXE



## EFXE Series - Aluminium push button stations

TYPE	DIMENSIONS					WEIGHT [kg]
	A	B	C	E	F	
EFXE-1828	180	280	100	130	260	2,9
EFXE-2310	230	100	110	180	80	1,78
EFXE-2320	230	200	110	180	180	2,42
EFXE-2328	230	280	110	180	260	2,97
EFXE-2333	230	330	110	180	310	3,37
EFXE-2340	230	400	110	180	380	3,82
EFXE-2360	230	600	110	180	580	6,93
EFXE-3140	310	400	110	262	382,5	5,28
EFXE-3160	310	600	110	260	580	8,64
EFXE-6060	600	600	200	525	555	25,94

\* For complete push button stations is necessary to ask to the Sales Office.

## INCREASE SAFETY

# Push Button Stations EFE Series – Glass-fiber reinforced polyester



Push button stations EFE Series, made of GRP, are manufactured by using enclosure AQ../AR.. Series.

They are designed to meet the requirements for use ON and OFF-SHORE, in petrochemical and marine applications and for any other industry where an explosive atmosphere may be present.

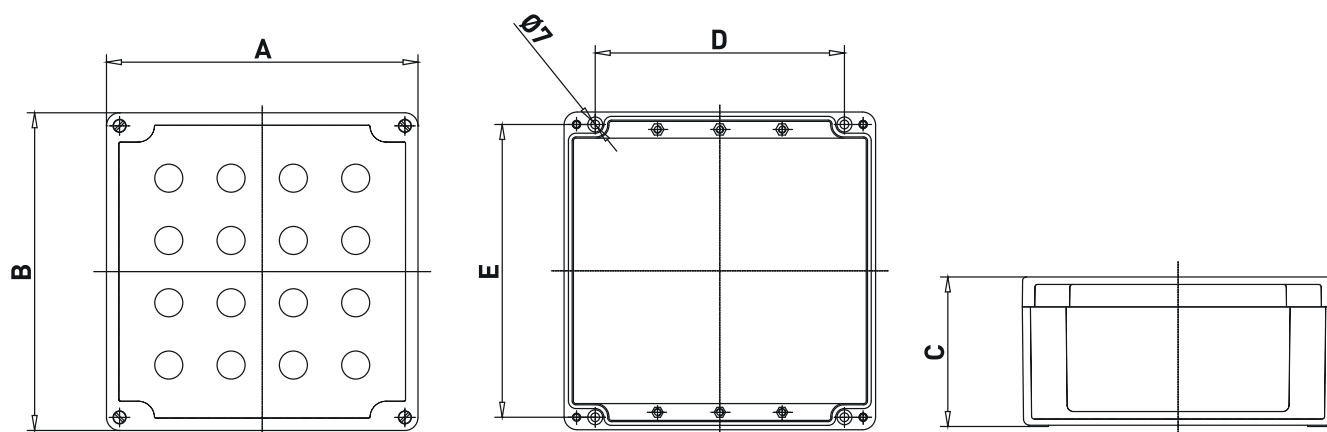
They can be equipped with following Ex-de certified components:

- Standard and emergency push buttons;
- Rotating switches;
- Signalling lamps;
- Measurement instruments.

## TECHNICAL FEATURES

<b>Material</b>	GRP (Glass-fiber reinforced polyester)
<b>IP rating</b>	IP66/IP67
<b>Ambient temperature range</b>	-50°C to +60°C
<b>Approvals</b>	IMQ 08 ATEX 028X GOST R
<b>Marking</b>	II 2 GD Ex-de IIC T(**) Gb / Ex-mb IIC T(**) Gb Ex-tb IIIC T(**) Db IP66/67 ** T6/T85°C, T5/T100°C, T4/T135°C
<b>Standard certificate label</b>	Made by self adhesive UV and corrosion resistant polyester, approved by INERIS Laboratory.
<b>Accessories available upon request</b>	Hinges Drain/breather valve Traffolyte/Stinless steel certificate label Internal mounting plate Earth continuity plates Passing through earth bolt

## Dimensions EFE



## EFE Series - GRP push button stations

TYPE	DIMENSIONS					WEIGHT [kg]
	A	B	C	D	E	
EFE-1212	120	122	90	82	106	0.75
EFE-1222	120	220	90	82	204	1,06
EFE-1616	160	160	90	110	140	1,29
EFE-1626	160	260	90	110	240	1.71
EFE-1636	160	360	90	110	340	2.15
EFE-2526	250	255	120	200	235	2.65
EFE-2540	250	400	120	200	380	3,65
EFE-2560	250	600	120	200	580	5,235
EFE-4140	405	400	120	355	380	5.58

\* For complete push button stations is necessary to ask to the Sales Office.

## Maximum number of entries on sides and cover

TYPE	M20 / 1/2"		M25 / 3/4"		M32 / 1"		M40 / 1" 1/4		M50 / 1" 1/2		M63 / 2"		COVER ENTRIES
	A	B	A	B	A	B	A	B	A	B	A	B	
EFE-1212	2	2	1	2	1	1	1	1	-	-	-	-	2
EFE-1222	2	5	1	4	1	3	1	3	-	-	-	-	6
EFE-1616	3	3	2	3	1	2	1	1	-	-	-	-	4
EFE-1626	3	5	2	5	1	4	1	3	-	3	-	-	8
EFE-1636	3	8	2	7	1	6	1	5	-	4	-	-	10
EFE-2526	8	10	8	10	3	7	3	4	2	3	2	2	16
EFE-2540	8	18	8	16	3	5	3	5	3	5	2	4	24
EFE-2560	8	25	8	24	3	10	3	8	2	6	2	6	40
EFE-4140	16	18	6	14	5	6	5	5	4	5	3	6	42

# INCREASE SAFETY

## Harmatex components

The Harmatex components range features large push button selection, with a choice of momentary or push-push actuation modes; pilot lamps and selector switches, with plastic or metal bezel. Harmatex range offers unrivalled flexibility with a modular design accomodating up to 6 contacts per operator head.

## SPARES & ACCESSORIES

<b>Material</b>	Metal and plastic
<b>IP rating</b>	IP66
<b>Ambient temperature range</b>	-20°C to +80°C
<b>Approvals</b>	INERIS 02 ATEX 9007U
<b>Marking</b>	II 2 GD Ex-de IIC (contacts) Ex-em II (pilot lamps) Ex-tD A21 IP66

### Flush push buttons



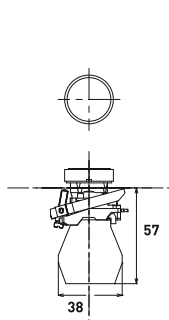
CODE	TYPE	BEZEL	COLOUR	CONTACT
B1301.500001	XBW4BA11 - MOMENTARY PUSH BUTTON	METAL	WHITE	1NO
B1301.500002	XBW4BA21 - MOMENTARY PUSH BUTTON	METAL	BLACK	1NO
B1301.500007	XBW4BA22 - MOMENTARY PUSH BUTTON	METAL	BLACK	1NC
B1301.500003	XBW4BA31 - MOMENTARY PUSH BUTTON	METAL	GREEN	1NO
B1301.500008	XBW4BA41 - MOMENTARY PUSH BUTTON	METAL	RED	1NO
B1301.500004	XBW4BA42 - MOMENTARY PUSH BUTTON	METAL	RED	1NC
B1301.500005	XBW4BA51 - MOMENTARY PUSH BUTTON	METAL	YELLOW	1NO
B1301.500006	XBW4BA61 - MOMENTARY PUSH BUTTON	METAL	BLUE	1NO

### Projecting push buttons

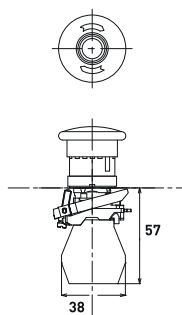


CODE	TYPE	BEZEL	COLOUR	CONTACT
B1301.517001	XBW4BL11 - MOMENTARY PUSH BUTTON	METAL	WHITE	1NO
B1301.517002	XBW4BL21 - MOMENTARY PUSH BUTTON	METAL	BLACK	1NO
B1301.517003	XBW4BL31 - MOMENTARY PUSH BUTTON	METAL	GREEN	1NO
B1301.517004	XBW4BL42 - MOMENTARY PUSH BUTTON	METAL	RED	1NC
B1301.517005	XBW4BL51 - MOMENTARY PUSH BUTTON	METAL	YELLOW	1NO
B1301.517006	XBW4BL61 - MOMENTARY PUSH BUTTON	METAL	BLUE	1NO

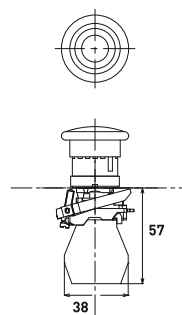
## Dimensions HARMATEX



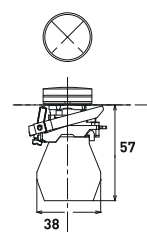
**Pushbutton**



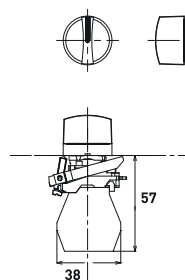
**Mushroom Pushbutton  
Twist to release**



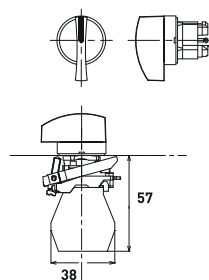
**Emergency Stop  
Mushroom Pushbutton**



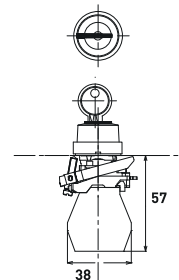
**Pilot light**



**Selector switches  
with standard handle**



**Selector switches  
with long handle**



**Key selector switches**

### Push buttons with silicone boot



CODE	TYPE	BEZEL	COLOUR	CONTACT
B1301.518001	XBW4BP11S - MOMENTARY PUSH BUTTON	METAL	WHITE	1NO
B1301.518002	XBW4BP21S - MOMENTARY PUSH BUTTON	METAL	BLACK	1NO
B1301.000002	XBW4BP31S - MOMENTARY PUSH BUTTON	METAL	GREEN	1NO
B1301.000001	XBW4BP42S - MOMENTARY PUSH BUTTON	METAL	RED	1NC
B1301.518005	XBW4BP51S - MOMENTARY PUSH BUTTON	METAL	YELLOW	1NO
B1301.518006	XBW4BP61S - MOMENTARY PUSH BUTTON	METAL	BLUE	1NO



B1301.518013	XBW5AP11S - MOMENTARY PUSH BUTTON	PLASTIC	WHITE	1NO
B1301.518014	XBW5AP21S - MOMENTARY PUSH BUTTON	PLASTIC	BLACK	1NO
B1301.518016	XBW5AP31S - MOMENTARY PUSH BUTTON	PLASTIC	GREEN	1NO
B1301.518019	XBW5AP42S - MOMENTARY PUSH BUTTON	PLASTIC	RED	1NC
B1301.518024	XBW5AP51S - MOMENTARY PUSH BUTTON	PLASTIC	YELLOW	1NO
B1301.518023	XBW5AP61S - MOMENTARY PUSH BUTTON	PLASTIC	BLUE	1NO

### Stop mushroom push button



CODE	TYPE	BEZEL	COLOUR	CONTACT
B1301.501001	XBW4BC21 - MOMENTARY MUSHROOM	METAL	BLACK	1NO
B1301.501002	XBW4BC31 - MOMENTARY MUSHROOM	METAL	GREEN	1NO
B1301.501003	XBW4BC42 - MOMENTARY MUSHROOM	METAL	RED	1NC
B1301.501004	XBW4BC51 - MOMENTARY MUSHROOM	METAL	YELLOW	1NO
B1301.501005	XBW4BC61 - MOMENTARY MUSHROOM	METAL	BLUE	1NO

B1301.522002	XBW5AC21 - MOMENTARY MUSHROOM	PLASTIC	BLACK	1NO
B1301.522003	XBW5AC31 - MOMENTARY MUSHROOM	PLASTIC	GREEN	1NO
B1301.522004	XBW5AC42 - MOMENTARY MUSHROOM	PLASTIC	RED	1NC
B1301.522005	XBW5AC51 - MOMENTARY MUSHROOM	PLASTIC	YELLOW	1NO
B1301.522006	XBW5AC61 - MOMENTARY MUSHROOM	PLASTIC	BLUE	1NO



## Emergency stop mushroom push buttons



CODE	TYPE	BEZEL	CONTACT
B1301.519001	XBW4BS142 - MUSHROOM TWIST T.R. WITH KEY	METAL	1NC
B1301.520001	XBW4BS542 - MUSHROOM TWIST T.R.	METAL	1NC



B1301.522007	XBW5AS142 - MUSHROOM TWIST T.R. WITH KEY	PLASTIC	1NC
B1301.522009	XBW5AS542 - MUSHROOM TWIST T.R.	PLASTIC	1NC

## Pilot lights



CODE	TYPE	BEZEL	COLOUR
B1301.526001	XLW4BV013 - PILOT LIGHT	METAL	WHITE
B1301.526002	XLW4BV033 - PILOT LIGHT	METAL	GREEN
B1301.526003	XLW4BV043 - PILOT LIGHT	METAL	RED
B1301.526004	XLW4BV053 - PILOT LIGHT	METAL	YELLOW
B1301.526005	XLW4BV063 - PILOT LIGHT	METAL	BLUE



B1301.526006	XLW5AV013 - PILOT LIGHT	PLASTIC	WHITE
B1301.526008	XLW5AV033 - PILOT LIGHT	PLASTIC	GREEN
B1301.526010	XLW5AV043 - PILOT LIGHT	PLASTIC	RED
B1301.526012	XLW5AV053 - PILOT LIGHT	PLASTIC	YELLOW
B1301.526014	XLW5AV063 - PILOT LIGHT	PLASTIC	BLUE

## Selector switches with standard handle



CODE	TYPE	BEZEL	POSITIONS	CONTACT
B1301.502001	XBW4BD21 - STAY PUT	METAL	2	1NO
B1301.506001	XBW4BD41 - SPRING RETURN	METAL	2	1NO
B1301.504001	XBW4BD33 - STAY PUT	METAL	3	1NO+1NO
B1301.508001	XBW4BD53 - SPRING RETURN TO CENTER	METAL	3	1NO+1NO
B1301.510001	XBW4BD73 - SPRING RETURN FROM LEFT	METAL	3	1NO+1NO
B1301.512001	XBW4BD83 - SPRING RETURN FROM RIGHT	METAL	3	1NO+1NO

B1301.516008	XBW5AD21 - STAY PUT	PLASTIC	2	1NO
B1301.516014	XBW5AD41 - SPRING RETURN	PLASTIC	2	1NO
B1301.500009	XBW5AD33 - STAY PUT	PLASTIC	3	1NO+1NO
B1301.516016	XBW5AD53 - SPRING RETURN TO CENTER	PLASTIC	3	1NO+1NO
B1301.516019	XBW5AD73 - SPRING RETURN FROM LEFT	PLASTIC	3	1NO+1NO
B1301.516021	XBW5AD83 - SPRING RETURN FROM RIGHT	PLASTIC	3	1NO+1NO

## Selector switches with long handle



CODE	TYPE	BEZEL	POSITIONS	CONTACT
B1301.516001	XBW4BJ21 - STAY PUT	METAL	2	1NO
B1301.516003	XBW4BJ41 - SPRING RETURN	METAL	2	1NO
B1301.516002	XBW4BJ33 - STAY PUT	METAL	3	1NO+1NO
B1301.516004	XBW4BJ53 - SPRING RETURN TO CENTER	METAL	3	1NO+1NO
B1301.516005	XBW4BJ73 - SPRING RETURN FROM LEFT	METAL	3	1NO+1NO
B1301.516006	XBW4BJ83 - SPRING RETURN FROM RIGHT	METAL	3	1NO+1NO



### Key selector switches

CODE	TYPE	BEZEL	POSITIONS	KEY WITHDRAWAL	CONTACT
B1301.514005	XBW4BG21 - STAY PUT	METAL	2	SX	1NO
B1301.514007	XBW4BG41 - STAY PUT	METAL	2	SX - DX	1NO
B1301.514020	XBW4BG61 - SPRING RETURN FROM RIGHT	METAL	2	SX	1NO
B1301.514001	XBW4BG03 - STAY PUT	METAL	3	SX - 0 - DX	1NO+1NO
B1301.514006	XBW4BG33 - STAY PUT	METAL	3	0	1NO+1NO
B1301.514008	XBW4BG53 - STAY PUT	METAL	3	SX - DX	1NO+1NO
B1301.514012	XBW4BG93 - STAY PUT	METAL	3	SX	1NO+1NO
B1301.514003	XBW4BG093 - STAY PUT	METAL	3	DX	1NO+1NO
B1301.514004	XBW4BG13 - SPRING RETURN FROM LEFT	METAL	3	0	1NO+1NO
B1301.514010	XBW4BG73 - SPRING RETURN TO CENTER	METAL	3	0	1NO+1NO
B1301.514011	XBW4BG83 - SPRING RETURN FROM RIGHT	METAL	3	0	1NO+1NO
B1301.514002	XBW4BG083 - SPRING RETURN FROM RIGHT	METAL	3	SX	1NO+1NO

### Contacts

CODE	TYPE	CONTACT
B1307.000369	ZBWE101 - NORMALLY OPEN CONTACT	NO
B1307.000366	ZBWE102 - NORMALLY CLOSE CONTACT	NC



### Rated operational characteristics

ITH MAX. 10A	AC-15		DC-13		Ui max. (V)
	Ue (V)	Ie max. (A)	Ue (V)	Ie max. (A)	
	120	6	24	2,87	415
	240	3	125	0,55	
	380	1,9	250	0,27	

### Lamps

CODE	TYPE
B1307.000244	ZBWV1 SPARE PILOT LIGHT BODY WHITE, RED, YELLOW, BLUE
B1307.000245	ZBWV3 SPARE PILOT LIGHT BODY FOR GREEN

