



BALLESTRA s.p.a.  
MILANO (ITALIA)

CUSTOMER :	DWG. :	3B45.80.050
LOCATION:	SHEET :	1
PLANT : SULPHUREX	OF :	33
JOB : 1e35	Code :	3B45KVFDE.xls

We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.  
Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.

# **ON-OFF BUTTERFLY VALVES DOUBLE EFFECT**

*Valvole on-off a farfalla a doppio effetto*

## **REVISION INDEX - *INDICE DELLE REVISIONI***

ORDER N° 291485 (TYCO VALVES)



BALLESTRA S.p.A.  
MILANO (ITALIA)

ON-OFF BUTTERFLY VALVES D.E.  
*Valvole on-off a farfalla d.e.*

(1E35.80-014)

DWG. : 3B45.80.u50

SH. : 2

REV. : 2

Code : 3B45KVFDE.xls

CUSTOMER :

LOCATION: JOB: 3B45

PLANT : SULPHUREX

We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization  
Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.

## GENERAL NOTES / NOTE GENERALI

### 1) ENVIRONMENTAL CONDITIONS / CONDIZIONI AMBIENTALI

MAX. TEMPERATURE / TEMPERATURA MAX.	: 40 °C
MIN. TEMPERATURE / TEMPERATURA MIN.	: 0 °C
MAX RELATIVE HUMIDITY / UMIDITA' RELATIVA MASSIMA	: 90 %

### 2) IS REQUIRED TROPICALIZATION FOR ALL INSTRUMENTS. *E' RICHIESTA LA TROPICALIZZAZIONE PER TUTTI GLI STRUMENTI.*



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)  
DWG : 3B45.80.050  
SH : 3  
REV : 2  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### ON-OFF BUTTERFLY VALVES DOUBLE EFFECT

1	Caratteristiche generali - General characteristics	
2	• Sigla della valvola - Valve tag	: KV 11.1A
3	Linea installazione valvola - Valve installation line	: 14"-AH-AR-11020-206
4		
5	• Tipo valvola - Valve type	: Farfalla - Butterfly
6	Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto ( Deve essere prevista anche la possibilità di azionamento manuale ).	
7	Valve with tight shut-off complete with double acting pneumatic actuator ( The possibility of a manual control has to be provided ).	
8		
9	• Condizioni di esercizio - Operating conditions	
10	Fluido di processo - Process fluid	: Process Air
11	Pressione di esercizio - Operating pressure	: Norm= 0.5 bar
12	Temperatura di esercizio - Operating temperature	: 5 / 160 °C
13		
14	• Materiali - Materials	
15	Corpo - Body	: CARBON STEEL
16	Farfalla - Butterfly	: CARBON STEEL
17	Anello di tenuta metallico - Seal ring metal	: UNSS 31803 + GRAPHITE
18		
19	• Dimensioni - Size and rating	
20	Diametro nominale - Nominal diameter	: DN 14"
21	Attacchi - Connections	: ANSI 150#RF - WAFER
22		
23	• Accessori - Accessoires	
24	N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa della valvola.	
25	N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of valve.	
26	Costruttore - Manufacturer	: See sheet 4
27	Modello - Model	: See sheet 4
28		
29	• Attuatore - Pneumatic operator	
30	Pressione comando	: 4 - 8 Bar
31	Control pressure	
32	Connessioni pneumatiche	: 1/4" GAS-F
33	Pneumatic connections	
34	Costruttore - Manufacturer	: AUTOMAX
35	Modello - Model	: SID 200D
36		

Note :

PURCHASING DATA		
Manufacturer	:	VANESSA
Model	:	30000
Supplier	:	
Order n°	:	



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)  
DWG : 3B45.80.050  
SH : 4  
REV : 4  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION ( FOR VALVE KV 11.1A )

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41

#### THECNICAL CHARACTERISTICS

Box protection degrre	:	IP 66
Material	:	ALUMINIUM PRESS. DIE-CASTING
Colour	:	BLACK
Electrical execution	:	WATERPROOF
Electrical connection	:	N° 3 - 1/2" NPT-F

#### COMPLETE WITH THE FOLLOWING COMPONENTS

##### 1. POSITION INDICATOR

Two colours	:	RED - CLOSED / GREEN - OPEN
Material	:	POLICARBONATE

##### 2. ACTUATING CAMS

With rotation angles from 0 to 90°

##### 3. TERMINAL BOARD

Prewired with N° 9 terminals of 2,5 mm<sup>2</sup>  
Colour

: STANDARD

##### 4. MICROSWITCHES

Will have to be installed in the box  
and connected to the  
terminal board N° 2  
Manufacturer  
Model  
Contact Rating  
Electrical certification

ITEM : ZS 11.1A o/c

: PROXIMITY SWITCH  
PEPPERL + FUCHS  
NCN4 - 12GM - 40Z0 (with led)  
0,1 A - 24 V d.c.

##### 5. FIXING BRACKET OF THE BOX COMPLETE OF THE BOLTS FOR FIXING NAMUR MECHANICAL CONNECTION

Material

: STAINLESS STEEL

Note:

#### PURCHASING DATA

Manufacturer	:	AUTOMAX
Model	:	WDC0217201
Supplier	:	Vanessa
Order n°	:	

RR/BT



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(AE35.80.014)

DWG : 3B45.80.050

SH : 5

REV : 2

Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### ON-OFF BUTTERFLY VALVES DOUBLE EFFECT

#### 1 Caratteristiche generali - General characteristics

- Sigla della valvola - Valve tag : KV 11.1B  
Linea installazione valvola - Valve installation line : 14"-AH-AR-11021-206

- Tipo valvola - Valve type : Farfalla - Butterfly  
Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto  
( Deve essere prevista anche la possibilità di azionamento manuale ).  
Valve with tight shut-off complete with double acting pneumatic actuator  
( The possibility of a manual control has to be provided ).

#### 11 Condizioni di esercizio - Operating conditions

- Fluido di processo - Process fluid : Process Air
- Pressione di esercizio - Operating pressure : Norm= 0.5 bar
- Temperatura di esercizio - Operating temperature : 5 / 160 °C

#### 16 Materiali - Materials

- Corpo - Body : CARBON STEEL
- Farfalla - Butterfly : CARBON STEEL
- Anello di tenuta metallico - Seal ring metal : UNS 31803 + GRAPHITE

#### 22 Dimensioni - Size and rating

- Diametro nominale - Nominal diameter : DN 14"
- Attacchi - Connections : ANSI 150#RF - WAFER

#### 26 Accessori - Accessoires

- N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa della valvola.
- N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of valve.

Costruttore - Manufacturer : See sheet 6

Modello - Model : See sheet 6

#### 34 Attuatore - Pneumatic operator

- Pressione comando - Control pressure : 4 - 8 Bar
- Connessioni pneumatiche - Pneumatic connections : 1/4" GAS-F
- Costruttore - Manufacturer : AUTOMAX
- Modello - Model : SID 200D

Note :

#### PURCHASING DATA

Manufacturer	:	VANESSA
Model	:	30000
Supplier	:	
Order n°	:	



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(IE35. 80. 014)

DWG : 3B45.80.050

SH : 6

REV : 4

Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION ( FOR VALVE KV 11.1B )

1

#### THECNICAL CHARACTERISTICS

Box protection degrre	: IP 66
Material	: ALUMINIUM PRESS. DIE-CASTING
Colour	: BLACK
Electrical execution	: WATERPROOF
Electrical connection	: N° 3 - 1/2" NPT-F

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

41

#### COMPLETE WITH THE FOLLOWING COMPONENTS

##### 1. POSITION INDICATOR

Two colours	: RED - CLOSED / GREEN - OPEN
Material	: POLICARBONATE

Mechanically integral with  
the shaft of the valve

##### 2. ACTUATING CAMS

With rotation angles from 0 to 90°

##### 3. TERMINAL BOARD

Prewired with N° 9 terminals of 2,5 mm<sup>2</sup>  
Colour

: STANDARD

##### 4. MICROSWITCHES

Will have to be installed in the box  
and connected to the

terminal board N° 2

Manufacturer

Model

Contact Rating

Electrical certification

ITEM : ZS 11.1B o/c

: PROXIMITY SWITCH

: PEPPERL + FUCHS

: NCN4 - 12GM - 40Z0 (with led)

: 0,1 A - 24 V d.c.

##### 5. FIXING BRACKET OF THE BOX

COMPLETE OF THE BOLTS FOR  
FIXING NAMUR MECHANICAL  
CONNECTION

Material

: STAINLESS STEEL

Note :

#### PURCHASING DATA

Manufacturer	: AUTOMAX
Model	: WDC0217201
Supplier	: VANESSA
Order n°	: RR / BT



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)  
DWG : 3B45.80.050  
SH : 7  
REV : 2  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### ON-OFF BUTTERFLY VALVES DOUBLE EFFECT

1      Caratteristiche generali - General characteristics  
2      • Sigla della valvola - Valve tag : KV 11.2  
3      Linea installazione valvola - Valve installation line : 14"-AH-11024-209  
4  
5      • Tipo valvola - Valve type : Farfalla - Butterfly  
6      Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto  
7      ( Deve essere prevista anche la possibilità di azionamento manuale ).  
8      Valve with tight shut-off complete with double acting pneumatic actuator  
9      ( The possibility of a manual control has to be provided ).  
10  
11     • Condizioni di esercizio - Operating conditions  
12     Fluido di processo - Process fluid : Regeneration Air  
13     Pressione di esercizio - Operating pressure : Norm= 0,04 bar  
14     Temperatura di esercizio - Operating temperature : 35 / 160 °C  
15  
16     • Materiali - Materials  
17     Corpo - Body : CARBON STEEL  
18     Farfalla - Butterfly : CARBON STEEL  
19     Anello di tenuta metallico - Seal ring metal : UNSS 31803 + GRAPHITE  
20  
21  
22     • Dimensioni - Size and rating  
23     Diametro nominale - Nominal diameter : DN 14"  
24     Attacchi - Connections : ANSI 150#RF - WAFER  
25  
26     • Accessori - Accessoires  
27     N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa  
28     della valvola.  
29     N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of  
30     valve.  
31     Costruttore - Manufacturer : See sheet 9  
32     Modello - Model : See sheet 9  
33  
34     • Attuatore - Pneumatic operator  
35     Pressione comando : 4 - 8 Bar  
36     Control pressure  
37     Connessioni pneumatiche : 1/4" GAS-F ( NAMUR )  
38     Pneumatic connections  
39     Costruttore - Manufacturer : AUTOMAX  
40     Modello - Model : SID 200D  
41

Note :

- 1) Valve complete of solenoid valve, mounted on pneumatic operator, for technical date see sheet 8
- 2) Valve complete with junction box, mounted on pneumatic operator, for technical date see sheet 9

### PURCHASING DATA

Manufacturer	:	VANESSA
Model	:	30000
Supplier	:	
Order n°	:	



BALLESTRA S.p.A.  
MILANO (ITALIA)

# INSTRUMENT SPECIFICATION

(1E35.80.014)  
DWG. : 3B45.80.050  
SH. : 8  
REV. : 4  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

## VALVOLA A SOLENOIDE - SOLENOID VALVE

1	Tipo Type	DOUBLE SOLENOID	<input type="checkbox"/>	2 Vie 2 Way	<input type="checkbox"/>	3 Vie 3 Way	<input type="checkbox"/>	4 Vie 4 Way	<input checked="" type="checkbox"/>	5 Vie 5 Way
2	Alimentazione Elettrica Power supply	110 V - 50 Hz		Classificazione area Area classification						
3	Valvola a 2 vie - in mancanza energia elettrica 2 way valve - on electric failure			<input type="checkbox"/>	Apre Open	<input type="checkbox"/>	Chiude Closed			
4	Valvola a 3/4/5 vie Valve at 3/4/5 ways	Solenoid energizzato Solenoid energized Solenoid disenergizzato Solenoid disengaged	Via Way "A" Via Way "B"	P-A P-B	Aperta Open Aperta Open		Chiusa Closed Chiusa Closed		Sfiato Vent Sfiato Vent	
5	Sigla Tag				KY 11.2					
6	Servizio Service				AIR TO KV 11.2					
7	Dati di processo Process data	Fluido Fluid			INSTRUMENT AIR					
8		Composti corrosivi Corrosive agents			NO				P	S 2 E
9		Temperatura Operating temperature	norm. / max						P	S 3 A
10		Pressione Operating pressure	norm. / max	30 °C					E	
11		Peso specifico Specific gravity	norm. / max		7 bar				P	S 4 A
12		Viscosità Viscosity							E	
13		Portata Flow rate			0,02 Cp				P	S 5 B
14		Tenuta perfetta Tight shut-off							E	
15		CV calcolato Calculated CV	CV scelto Selected CV						P	
16		Dimens. corpo Body size	Dimens. sede Port size						A	
17	Corpo Body	Connessioni e rating Rating and connections			1/4" GAS-F				B	
18		Materiale corpo Body material			ALLUMIN.				P	S EA P EB
19		Materiale sede Seat material			INOX				A	
20		Materiale baderna Packing material			NBR				B	
21		Azionata da pilota Pilot operated			NO				P	
22	Access. Access.	Riarmo manuale Manual reset	Operatore manuale Manual operator	NO	YES				A	
23	Attacco elettrico Electrical connection			1/2" NPT-F				B		
24	Tipo di contenitore Housing type			IP 65				E		
25	Tropicalizzazione Tropicalization			YES				EA		
Note :				PURCHASING DATA						
				Manufacturer	ASCO JOUCOMATIC					
				Model	EMTG551B302N0-M5/50					
				Supplier	VANESSA					
				Order n°						



BALLESTRA S.p.A.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)  
DWG : 3B45.80.050  
SH : 9  
REV : 4  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION ( FOR VALVE KV 11.2 )

1	THECNICAL CHARACTERISTICS	
2	Box protection degrre	: IP 66
3	Material	: ALUMINIUM PRESS. DIE-CASTING
4	Colour	: BLACK
5	Electrical execution	: WATERPROOF
6	Electrical connection	: N° 3 - 1/2" NPT-F
7	COMPLETE WITH THE FOLLOWING COMPONENTS	
8	1. POSITION INDICATOR	
9	Two colours	: RED - CLOSED / GREEN - OPEN
10	Material	: POLICARBONATE
11	Mechanically integral with the shaft of the valve	
12	2. ACTUATING CAMS	
13	With rotation angles from 0 to 90°	
14	3. TERMINAL BOARD	
15	Prewired with N° 9 terminals of 2,5 mm <sup>2</sup>	
16	Colour	: STANDARD
17	4. MICROSWITCHES	
18	Will have to be installed in the box and connected to the terminal board N° 2	: ITEM : ZS 11.2 o/c
19	Manufacturer	: PROXIMITY SWITCH
20	Model	: PEPPERL + FUCHS
21	Contact Rating	: NCN4 - 12GM - 40Z0 (with led)
22	Electrical certification	: 0,1 A - 24 V d.c.
23	5. FIXING BRACKET OF THE BOX COMPLETE OF THE BOLTS FOR FIXING NAMUR MECHANICAL CONNECTION	
24	Material	: STAINLESS STEEL
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		

Note :	PURCHASING DATA	
	Manufacturer	: AUTOMAX
	Model	: WDC0217201 RR/BT
	Supplier	: VANESSA
	Order n°	:



BALLESTRA S.p.A.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)

DWG : 3B45.80.050

CUSTOMER:

SH : 10

PLANT: SULPHUREX

REV : Z

JOB: 3B45

Code : 3B45KVDFE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

### ON-OFF BUTTERFLY VALVES DOUBLE EFFECT

#### 1 Caratteristiche generali - General characteristics

- 2 • Sigla della valvola - Valve tag : KV 11.3
- 3 Linea installazione valvola - Valve installation line : 14"-AH-11008-209
- 4
- 5
- 6 • Tipo valvola - Valve type : Farfalla - Butterfly
- 7 Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto
- 8 ( Deve essere prevista anche la possibilità di azionamento manuale ).
- 9 Valve with tight shut-off complete with double acting pneumatic actuator
- 10 ( The possibility of a manual control has to be provided ).

#### 11 • Condizioni di esercizio - Operating conditions

- 12 Fluido di processo - Process fluid : Regeneration Air
- 13 Pressione di esercizio - Operating pressure : Norm= 0,04 bar
- 14 Temperatura di esercizio - Operating temperature : 35 / 160 °C

#### 16 • Materiali - Materials

- 17 Corpo - Body : CARBON STEEL
- 18 Farfalla - Butterfly : CARBON STEEL
- 19 Anello di tenuta metallico - Seal ring metal : UNSS 31803 + GRAPHITE

#### 22 • Dimensioni - Size and rating

- 23 Diametro nominale - Nominal diameter : DN 14"
- 24 Attacchi - Connections : ANSI 150#RF - WAFER

#### 26 • Accessori - Accessoires

- 27 N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa
- 28 della valvola.

N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of valve.

- 31 Costruttore - Manufacturer : See sheet 12
- 32 Modello - Model : See sheet 12

#### 34 • Attuatore - Pneumatic operator

- 35 Pressione comando : 4 - 8 Bar
- 36 Control pressure
- 37 Connessioni pneumatiche : 1/4" GAS-F ( NAMUR )
- 38 Pneumatic connections
- 39 Costruttore - Manufacturer : AUTOMAX
- 40 Modello - Model : SID 200D

Note :

- 1) Valve complete of solenoid valve, mounted on pneumatic operator, for technical date see sheet 11
- 2) Valve complete with junction box, mounted on pneumatic operator, for technical date see sheet 12

#### PURCHASING DATA

- |              |   |         |
|--------------|---|---------|
| Manufacturer | : | VANESSA |
| Model        | : | 30000   |
| Supplier     | : |         |
| Order n°     | : |         |



# INSTRUMENT SPECIFICATION

(1E35.80.014)

DWG. : 3B45.80.050

SH. : 11

REV. : 4

Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

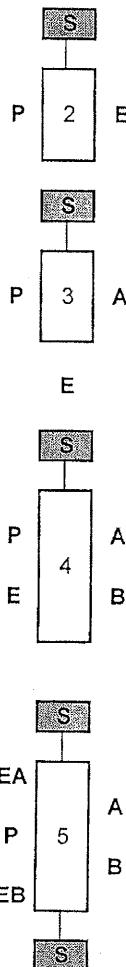
## VALVOLA A SOLENOIDE - SOLENOID VALVE

1	Tipo Type	DOUBLE SOLENOID	<input type="checkbox"/>	2 Vie 2 Way	<input type="checkbox"/>	3 Vie 3 Way	<input type="checkbox"/>	4 Vie 4 Way	<input checked="" type="checkbox"/>	5 Vie 5 Way
2	Alimentazione Elettrica Power supply	110 V - 50 Hz		Classificazione area Area classification				WATER PROOF		
3	Valvola a 2 vie - in mancanza energia elettrica 2 way valve - on electric failure			<input type="checkbox"/>	Apre Open	<input type="checkbox"/>	Chiude Closed			
4	Valvola a 3/4/5 vie Valve at 3/4/5 ways	Solenoid energizzato Solenoid energized	Via Way "A"	P-A	Aperta Open		Chiusa Closed		Sfiato Vent	
		Solenoid disenergizzato Solenoid disengaged	Via Way "B"	P-B	Aperta Open		Chiusa Closed		Sfiato Vent	
5	Sigla Tag	KY 11.3								
6	Servizio Service	AIR TO KV 11.3								
7	Dati di processo Process data	Fluido Fluid		INSTRUMENT AIR						
8		Composti corrosivi Corrosive agents		NO						
9		Temperatura norm. / max Operating temperature norm. / max		30 °C						
10		Pressione norm. / max Operating pressure norm. / max			7 bar					
11		Peso specifico Specific gravity								
12		Viscosità Viscosity		0,02 Cp						
13		Portata Flow rate								
14		Tenuta perfetta Tight shut-off								
15		CV calcolato Calculated CV	CV scelto Selected CV							
16		Dimens. corpo Body size	Dimens. sede Port size							
17		Connessioni e rating Rating and connections		1/4" GAS-F						
18		Materiale corpo Body material		ALLUMIN.						
19		Materiale sede Seat material		INOX						
20		Materiale baderna Packing material		NBR						
21		Azionata da pilota Pilot operated		NO						
22	Access. Access.	Riarmo manuale Manual reset	Operatore manuale Manual operator	NO	YES					
23	Corpo Body	Attacco elettrico Electrical connection		1/2" NPT-F						
24		Tipo di contenitore Housing type		IP 65						
25		Tropicalizzazione Tropicalization		YES						

Note :

### PURCHASING DATA

Manufacturer	: ASCO JOUCOMATIC
Model	: EHTG551B3010-110/50
Supplier	: VANESSA
Order n°	:





BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)  
DWG : 3B45.80.050  
SH : 12  
REV : 4  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION ( FOR VALVE KV 11.3 )

1	THECNICAL CHARACTERISTICS	
2	Box protection degrre	: IP 66
3	Material	: ALUMINIUM PRESS. DIE-CASTING
4	Colour	: BLACK
5	Electrical execution	: WATERPROOF
6	Electrical connection	: N° 3 - 1/2" NPT-F
7	COMPLETE WITH THE FOLLOWING COMPONENTS	
8	1. POSITION INDICATOR	
9	Two colours	: RED - CLOSED / GREEN - OPEN
10	Material	: POLICARBONATE
11	Mechanically integral with the shaft of the valve	
12	2. ACTUATING CAMS	
13	With rotation angles from 0 to 90°	
14	3. TERMINAL BOARD	
15	Prewired with N° 9 terminals of 2,5 mm²	
16	Colour	: STANDARD
17	4. MICROSWITCHES	
18	Will have to be installed in the box and connected to the terminal board N° 2	: ITEM : ZS 11.3 o/c
19	Manufacturer	: PROXIMITY SWITCH
20	Model	: PEPPERL + FUCHS
21	Contact Rating	: NCN4 - 12GM - 40Z0 (with led)
22	Electrical certification	: 0,1 A - 24 V d.c.
23	5. FIXING BRACKET OF THE BOX	
24	COMPLETE OF THE BOLTS FOR	
25	FIXING NAMUR MECHANICAL CONNECTION	
26	Material	: STAINLESS STEEL

Note :	PURCHASING DATA	
	Manufacturer	: AUTOMAX
	Model	: WDC0217201 RR/BT
	Supplier	: VANESSA
	Order n°	:



BALLESTRA S.p.A.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

1E35-80.014

DWG	: 3B45.80.050
SH	: 13
REV	: 2
Code	: 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

### ON-OFF BUTTERFLY VALVES DOUBLE EFFECT

1	Caratteristiche generali - General characteristics	
2	• Sigla della valvola - Valve tag	: KV 11.4
3	Linea installazione valvola - Valve installation line	: 14"-AV-11010-209
4		
5	• Tipo valvola - Valve type	: Farfalla - Butterfly
6	Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto	
7	( Deve essere prevista anche la possibilità di azionamento manuale ).	
8	Valve with tight shut-off complete with double acting pneumatic actuator	
9	( The possibility of a manual control has to be provided ).	
10		
11	• Condizioni di esercizio - Operating conditions	
12	Fluido di processo - Process fluid	: Regeneration Air
13	Pressione di esercizio - Operating pressure	: Norm= 0,04 bar
14	Temperatura di esercizio - Operating temperature	: 35 / 160 °C
15		
16	• Materiali - Materials	
17	Corpo - Body	: CARBON STEEL
18	Farfalla - Butterfly	: CARBON STEEL
19	Anello di tenuta metallico - Seal ring metal	: UNSS 31803 + GRAPHITE
20		
21		
22	• Dimensioni - Size and rating	
23	Diametro nominale - Nominal diameter	: DN 14"
24	Attacchi - Connections	: ANSI 150#RF - WAFER
25		
26	• Accessori - Accessoires	
27	N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa	
28	della valvola.	
29	N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of	
30	valve.	
31	Costruttore - Manufacturer	: See sheet 15
32	Modello - Model	: See sheet 15
33		
34	• Attuatore - Pneumatic operator	
35	Pressione comando	: 4 - 8 Bar
36	Control pressure	
37	Connessioni pneumatiche	: 1/4" GAS-F ( NAMUR )
38	Pneumatic connections	
39	Costruttore - Manufacturer	: AUTOMAX
40	Modello - Model	: SID 200D
41		

Note :

- 1) Valve complete of solenoid valve, mounted on pneumatic operator, for technical date see sheet 14
- 2) Valve complete with junction box, mounted on pneumatic operator, for technical date see sheet 15

### PURCHASING DATA

Manufacturer	: VANESSA
Model	: 30000
Supplier	:
Order n°	:



BALLESTRA s.p.a.  
MILANO (ITALIA)

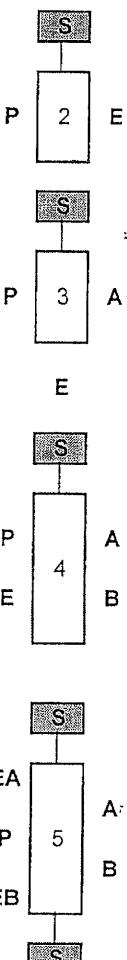
# INSTRUMENT SPECIFICATION

(1E35.80.014)  
DWG. : 3B45.80.050  
SH. : 14  
REV. : 4  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

## VALVOLA A SOLENOIDE - SOLENOID VALVE

1	Tipo Type	DOUBLE SOLENOID	<input type="checkbox"/> 2 Vie 2 Way	<input type="checkbox"/> 3 Vie 3 Way	<input type="checkbox"/> 4 Vie 4 Way	<input checked="" type="checkbox"/> 5 Vie 5 Way				
2	Alimentazione Elettrica Power supply	110 - 50 Hz	Classificazione area Area classification	WATER PROOF						
3	Valvola a 2 vie - in mancanza energia elettrica 2 way valve - on electric failure		<input type="checkbox"/>	Apre Open	<input type="checkbox"/>	Chiude Closed				
4	Valvola a 3/4/5 vie Valve at 3/4/5 ways	Solenoid energizzato Solenoid energized Solenoid disenergizzato Solenoid disengaged	Via Way "A" Via Way "B"	P-A P-B	Aperta Open Aperta Open	Chiusa Closed Chiusa Closed				
5	Sigla Tag	KY 11.4								
6	Servizio Service	AIR TO KV 11.4								
7	Dati di processo Process data	Fluido Fluid	INSTRUMENT AIR							
8		Composti corrosivi Corrosive agents	NO							
9		Temperatura norm. / max Operating temperature norm. / max	30 °C							
10		Pressione norm. / max Operating pressure norm. / max		7 bar						
11		Peso specifico Specific gravity								
12		Viscosità Viscosity	0,02 Cp							
13		Portata Flow rate								
14		Tenuta perfetta Tight shut-off								
15		CV calcolato Calculated CV	CV scelto Selected CV							
16		Dimens. corpo Body size	Dimens. sede Port size							
17		Connessioni e rating Rating and connections	1/4" GAS-F							
18		Materiale corpo Body material	ALLUMIN.							
19		Materiale sede Seat material	INOX							
20		Materiale baderna Packing material	NBR							
21		Azionata da pilota Pilot operated	NO							
22	Access. Access.	Riarmo manuale Manual reset	Operatore manuale Manual operator	NO	YES					
23	Corpo Body	Attacco elettrico Electrical connection	1/2" NPT-F							
24		Tipo di contenitore Housing type	IP 65							
25		Tropicalizzazione Tropicalization	YES							
Note :	PURCHASING DATA									
	Manufacturer	ASCO JOUCOMATIC								
	Model	EMTG551B302KO - 110/50								
	Supplier	VANESSA								
	Order n°									



P INLET  
A OUTLET  
B OUTLET  
E VENT  
EA VENT  
EB VENT



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)

DWG : 3B45.80.050

SH : 15

REV : 4

Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION ( FOR VALVE KV 11.4 )

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41

#### THECNICAL CHARACTERISTICS

Box protection degrre	:	IP 66
Material	:	ALUMINIUM PRESS. DIE-CASTING
Colour	:	BLACK
Electrical execution	:	WATERPROOF
Electrical connection	:	N° 3 - 1/2" NPT-F

#### COMPLETE WITH THE FOLLOWING COMPONENTS

##### 1. POSITION INDICATOR

Two colours	:	RED - CLOSED / GREEN - OPEN
Material	:	POLICARBONATE
Mechanically integral with the shaft of the valve	:	

##### 2. ACTUATING CAMS

With rotation angles from 0 to 90°

##### 3. TERMINAL BOARD

Prewired with N° 9 terminals of 2,5 mm<sup>2</sup>

Colour :

STANDARD

##### 4. MICROSWITCHES

Will have to be installed in the box and connected to the terminal board N° 2

Manufacturer :

PROXIMITY SWITCH

Model :

PEPPERL + FUCHS

Contact Rating :

NCN4 - 12GM - 40Z0 (with led)

Electrical certification :

0,1 A - 24 V d.c.

##### 5. FIXING BRACKET OF THE BOX

#### COMPLETE OF THE BOLTS FOR FIXING NAMUR MECHANICAL CONNECTION

Material :

STAINLESS STEEL

Note :

#### PURCHASING DATA

Manufacturer	:	AUTOMAX
Model	:	WDC0217201 RR/BT
Supplier	:	VANESSA
Order n°	:	

		INSTRUMENT SPECIFICATION	14235.80.0141	
BALLESTRA s.p.a. MILANO (ITALIA)		CUSTOMER:	DWG : 3B45.80.050	SH : 16
		PLANT: SULPHUREX GH / F	REV : 2	
		JOB: 3B45	Code : 3B45KVFDE.xls	

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

## ON-OFF BUTTERFLY VALVES DOUBLE EFFECT

1	<b>Caratteristiche generali - General characteristics</b>		
2	<b>Sigla della valvola - Valve tag</b>	:	KV 11.6
3	Linea installazione valvola - Valve installation line	:	14"-AH-11008-209
4	<b>Tipo valvola - Valve type</b>		
5	Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto ( Deve essere prevista anche la possibilità di azionamento manuale ).	:	Farfalla - Butterfly
6	Valve with tight shut-off complete with double acting pneumatic actuator ( The possibility of a manual control has to be provided ).	:	
7	<b>Condizioni di esercizio - Operating conditions</b>		
8	Fluido di processo - Process fluid	:	Regeneration Air
9	Pressione di esercizio - Operating pressure	:	Norm= 0,04 bar
10	Temperatura di esercizio - Operating temperature	:	35 / 160 °C
11	<b>Materiali - Materials</b>		
12	Corpo - Body	:	CARBON STEEL
13	Farfalla - Butterfly	:	CARBON STEEL
14	Anello di tenuta metallico - Seal ring metal	:	UNSS 31803 + GRAPHITE
15	<b>Dimensioni - Size and rating</b>		
16	Diametro nominale - Nominal diameter	:	DN 14"
17	Attacchi - Connections	:	ANSI 150#RF - WAFER
18	<b>Accessori - Accessoires</b>		
19	N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa della valvola.		
20	N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of valve.		
21	Costruttore - Manufacturer	:	See sheet 18
22	Modello - Model	:	See sheet 18
23	<b>Attuatore - Pneumatic operator</b>		
24	Pressione comando	:	4 - 8 Bar
25	Control pressure	:	
26	Connessioni pneumatiche	:	1/4" GAS-F
27	Pneumatic connections	:	
28	Costruttore - Manufacturer	:	AUTOMAX
29	Modello - Model	:	SID 200D
30			
31			
32			
33			
34			
35			
36			
37			
38			
39			
40			
41			

Note :

- 1) Valve complete of solenoid valve, mounted on pneumatic operator, for technical date see sheet 17
- 2) Valve complete with junction box, mounted on pneumatic operator, for technical date see sheet 18

		PURCHASING DATA	
		Manufacturer	: VANESSA
		Model	: 30000
		Supplier	:
		Order n°	:



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)

DWG. : 3B45.80.050

CUSTOMER: SH. : 17

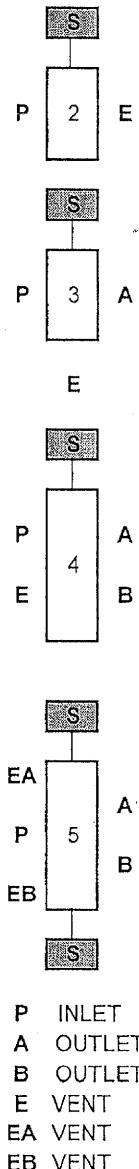
PLANT: SULPHUREX REV. : 4

JOB: 3B45 Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### VALVOLA A SOLENOIDE - SOLENOID VALVE

1	Tipo Type	DOUBLE SOLENOID	<input type="checkbox"/> 2 Vie 2 Way	<input type="checkbox"/> 3 Vie 3 Way	<input type="checkbox"/> 4 Vie 4 Way	<input checked="" type="checkbox"/> 5 Vie 5 Way	
2	Alimentazione Elettrica Power supply	110 V - 50 Hz	Classificazione area Area classification	WATER PROOF			
3	Valvola a 2 vie - in mancanza energia elettrica 2 way valve - on electric failure		<input type="checkbox"/> Apre Open	<input type="checkbox"/> Chiude Closed			
4	Valvola a 3/4/5 vie Valve at 3/4/5 ways	Solenoid energizzato Solenoid energized Solenoid disenergizzato Solenoid disengaged	Via Way "A" Via Way "B"	P-A Aperta Open P-B Aperta Open	Chiusa Closed Chiusa Closed	Sfiato Vent Sfiato Vent	
5	Sigla Tag	KY 11.6					
6	Servizio Service	AIR TO KV 11.6					
7	Dati di processo Process data	Fluido Fluid	INSTRUMENT AIR				
8		Composti corrosivi Corrosive agents	NO				
9		Temperatura norm. / max Operating temperature norm. / max	30 °C				
10		Pressione norm. / max Operating pressure norm. / max		7 bar			
11		Peso specifico Specific gravity					
12		Viscosità Viscosity	0,02 Cp				
13		Portata Flow rate					
14		Tenuta perfetta Tight shut-off					
15		CV calcolato Calculated CV	CV scelto Selected CV				
16		Dimens. corpo Body size	Dimens. sede Port size				
17		Connessioni e rating Rating and connections	1/4" GAS-F				
18		Materiale corpo Body material	ALLUMIN.				
19		Materiale sede Seat material	INOX				
20		Materiale baderna Packing material	NBR				
21		Azionata da pilota Pilot operated	NO				
22	Access. Access.	Riarmo manuale Manual reset	Operatore manuale Manual operator	NO	YES		
23	Corpo Body	Attacco elettrico Electrical connection	1/2" NPT-F				
24		Tipo di contenitore Housing type	IP 65				
25		Tropicalizzazione Tropicalization	YES				
Note :			PURCHASING DATA				
			Manufacturer	ASCO JOUCOMATIC			
			Model	EITG551B302110-110/50			
			Supplier	VANESSA			
			Order n°				





BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.04)

DWG : 3B45.80.050

CUSTOMER:	SH : 18
PLANT: SULPHUREX	REV : 4
JOB: 3B45	Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION ( FOR VALVE KV 11.6 )

1	THECNICAL CHARACTERISTICS	
2	Box protection degrre	: IP 66
3	Material	: ALUMINIUM PRESS. DIE-CASTING
4	Colour	: BLACK
5	Electrical execution	: WATERPROOF
6	Electrical connection	: N° 3 - 1/2" NPT-F
7	COMPLETE WITH THE FOLLOWING COMPONENTS	
8	1. POSITION INDICATOR	
9	Two colours	: RED - CLOSED / GREEN - OPEN
10	Material	: POLICARBONATE
11	Mechanically integral with the shaft of the valve	
12	2. ACTUATING CAMS	
13	With rotation angles from 0 to 90°	
14	3. TERMINAL BOARD	
15	Prewired with N° 9 terminals of 2,5 mm <sup>2</sup>	
16	Colour	: STANDARD
17	4. MICROSWITCHES	
18	Will have to be installed in the box	
19	and connected to the	
20	terminal board N° 2	: PROXIMITY SWITCH
21	Manufacturer	: PEPPERL + FUCHS
22	Model	: NCN4 - 12GM - 40Z0 (with led)
23	Contact Rating	: 0,1 A - 24 V d.c.
24	Electrical certification	
25	5. FIXING BRACKET OF THE BOX	
26	COMPLETE OF THE BOLTS FOR	
27	FIXING NAMUR MECHANICAL	
28	CONNECTION	
29	Material	: STAINLESS STEEL

Note :

### PURCHASING DATA

Manufacturer	:	AUTOMAX
Model	:	WDC0217201 RR/BT
Supplier	:	VANESSA
Order n°	:	

 <b>BALLESTRA s.p.a.</b> MILANO (ITALIA)	INSTRUMENT SPECIFICATION		(1E35.80.014)
	CUSTOMER:	SH	: 19
	PLANT: SULPHUREX GH / F	REV	: 2
	JOB: 3B45	Code	: 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

## ON-OFF BUTTERFLY VALVES DOUBLE EFFECT

1	<b>Caratteristiche generali - General characteristics</b>		
2	• <b>Sigla della valvola - Valve tag</b>	:	KV 11.8
3	Linea installazione valvola - Valve installation line	:	14"-AH-12030-209
4			
5	• <b>Tipo valvola - Valve type</b>	:	Farfalla - Butterfly
6	Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto	:	
7	( Deve essere prevista anche la possibilità di azionamento manuale ).	:	
8	Valve with tight shut-off complete with double acting pneumatic actuator	:	
9	( The possibility of a manual control has to be provided ).	:	
10			
11	• <b>Condizioni di esercizio - Operating conditions</b>	:	
12	Fluido di processo - Process fluid	:	Regeneration Air
13	Pressione di esercizio - Operating pressure	:	Norm= 0,04 bar
14	Temperatura di esercizio - Operating temperature	:	30 / 160 °C
15			
16	• <b>Materiali - Materials</b>	:	
17	Corpo - Body	:	CARBON STEEL
18	Farfalla - Butterfly	:	CARBON STEEL
19	Anello di tenuta metallico - Seal ring metal	:	UNSS 31803 + GRAPHITE
20			
21			
22	• <b>Dimensioni - Size and rating</b>	:	
23	Diametro nominale - Nominal diameter	:	DN 14"
24	Attacchi - Connections	:	ANSI 150#RF - WAFER
25			
26	• <b>Accessori - Accessoires</b>	:	
27	N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa	:	
28	della valvola.	:	
29	N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of	:	
30	valve.	:	
31	Costruttore - Manufacturer	:	See sheet 21
32	Modello - Model	:	See sheet 21
33			
34	• <b>Attuatore - Pneumatic operator</b>	:	
35	Pressione comando	:	4 - 8 Bar
36	Control pressure	:	
37	Connessioni pneumatiche	:	1/4" GAS-F
38	Pneumatic connections	:	
39	Costruttore - Manufacturer	:	AUTOMAX
40	Modello - Model	:	SID 200D
41			

Note : 1) Valve complete of solenoid valve, mounted on pneumatic operator, for technical date see sheet 20 2) Valve complete with junction box, mounted on pneumatic operator, for technical date see sheet 21	PURCHASING DATA		
	Manufacturer	:	VANESSA
	Model	:	30000
	Supplier	:	
	Order n°	:	

 <b>BALLESTRA s.p.a.</b> MILANO (ITALIA)		INSTRUMENT SPECIFICATION					(1E35.80.014)	
		CUSTOMER:			DWG. : 3B45.80.050			
		PLANT: SULPHUREX			SH. : 20			
		JOB: 3B45			REV. : 4			
Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurla anche in parte o di renderlo a terzi senza nostra autorizzazione scritta. We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization								
<b>VALVOLA A SOLENOIDE - SOLENOID VALVE</b>								
1	Type	DOUBLE SOLENOID	<input type="checkbox"/> 2 Vie 2 Way	<input type="checkbox"/> 3 Vie 3 Way	<input type="checkbox"/> 4 Vie 4 Way	<input checked="" type="checkbox"/> 5 Vie 5 Way		
2	Alimentazione Elettrica Power supply 110 V - 50 Hz		Classificazione area Area classification		WATER PROOF			
3	Valvola a 2 vie - in mancanza energia elettrica 2 way valve - on electric failure		<input type="checkbox"/>	Apre Open	<input type="checkbox"/>	Chiude Closed		
4	Valvola a 3/4/5 vie Valve at 3/4/5 ways	Solenoid energizzato Solenoid energized	Via Way "A"	P-A	Aperta Open	Chiusa Closed	Sfiato Vent	
		Solenoid disenergizzato Solenoid disengaged	Via Way "B"	P-B	Aperta Open	Chiusa Closed	Sfiato Vent	
5	Sigla Tag		KY 11.8					
6	Servizio Service		AIR TO KV 11.8					
7	Dati di processo Process data	Fluido Fluid	INSTRUMENT AIR					
8		Composti corrosivi Corrosive agents	NO					
9		Temperatura norm. / max Operating temperature norm. / max	30 °C					
10		Pressione norm. / max Operating pressure norm. / max		7 bar				
11		Peso specifico Specific gravity						
12		Viscosità Viscosity	0,02 Cp					
13		Portata Flow rate						
14		Tenuta perfetta Tight shut-off						
15		CV calcolato Calculated CV	CV scelto Selected CV					
16		Corpo Body	Dimens. corpo Body size	Dimens. sede Port size				
17			Connessioni e rating Rating and connections		1/4" GAS-F			
18			Materiale corpo Body material		ALLUMIN.			
19			Materiale sede Seat material		INOX			
20			Materiale baderna Packing material		NBR			
21	Azione da pilota Pilot operated		NO					
22	Access. Access.		Riarmo manuale Manual reset	Operatore manuale Manual operator	NO	YES		
23		Attacco elettrico Electrical connection		1/2" NPT-F				
24		Tipo di contenitore Housing type		IP 65				
25		Tropicalizzazione Tropicalization		YES				
Note :				PURCHASING DATA				
				Manufacturer	ASCO JOUCOMATIC			
				Model	EHTG551B302-M0/50			
				Supplier	VANESSA			
				Order n°				



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)

DWG : 3B45.80.050

SH : 21

REV : 4

Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.

We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION ( FOR VALVE KV 11.8 )

1	THECNICAL CHARACTERISTICS	
2	Box protection degrre	IP 66
3	Material	ALUMINIUM PRESS. DIE-CASTING
4	Colour	BLACK
5	Electrical execution	WATERPROOF
6	Electrical connection	N° 3 - 1/2" NPT-F
7	COMPLETE WITH THE FOLLOWING COMPONENTS	
8	1. POSITION INDICATOR	
9	Two colours	RED - CLOSED / GREEN - OPEN
10	Material	POLICARBONATE
11	Mechanically integral with the shaft of the valve	
12	2. ACTUATING CAMS	
13	With rotation angles from 0 to 90°	
14	3. TERMINAL BOARD	
15	Prewired with N° 9 terminals of 2,5 mm <sup>2</sup>	
16	Colour	STANDARD
17	4. MICROSWITCHES	
18	Will have to be installed in the box and connected to the terminal board N° 2	ITEM : ZS 11.8 o/c
19	Manufacturer	PROXIMITY SWITCH
20	Model	PEPPERL + FUCHS
21	Contact Rating	NCN4 - 12GM - 40Z0 (with led)
22	Electrical certification	0,1 A - 24 V d.c.
23	5. FIXING BRACKET OF THE BOX	
24	COMPLETE OF THE BOLTS FOR	
25	FIXING NAMUR MECHANICAL CONNECTION	
26	Material	STAINLESS STEEL

Note :

### PURCHASING DATA

Manufacturer	:	AUTOMAX
Model	:	WDC0217201 RR   BT
Supplier	:	VANESSA
Order n°	:	

 <b>BALLESTRA s.p.a.</b> MILANO (ITALIA)	INSTRUMENT SPECIFICATION		(1E35.80.014)	
	CUSTOMER:	SH :	22	DWG : 3B45.80.050
	PLANT: SULPHUREX	REV :	2	Code : 3B45KVFDE.xls
Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta. We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization				
ON-OFF BUTTERFLY VALVES DOUBLE EFFECT				
1	<b>Caratteristiche generali - General characteristics</b>			
2	Sigla della valvola - Valve tag	:	KV 11.10A	
3	Linea installazione valvola - Valve installation line	:	14"- AA-11022-206	
4				
5	Tipo valvola - Valve type	:	Farfalla - Butterfly	
6	Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto			
7	( Deve essere prevista anche la possibilità di azionamento manuale ).			
8	Valve with tight shut-off complete with double acting pneumatic actuator			
9	( The possibility of a manual control has to be provided ).			
10				
11	<b>Condizioni di esercizio - Operating conditions</b>			
12	Fluido di processo - Process fluid	:	Regeneration Air	
13	Pressione di esercizio - Operating pressure	:	Norm= 0,04 bar	
14	Temperatura di esercizio - Operating temperature	:	35 / 160 °C	
15				
16	<b>Materiali - Materials</b>			
17	Corpo - Body	:	CARBON STEEL	
18	Farfalla - Butterfly	:	CARBON STEEL	
19	Anello di tenuta metallico - Seal ring metal	:	UNSS 31803 + GRAPHITE	
20				
21				
22	<b>Dimensioni - Size and rating</b>			
23	Diametro nominale - Nominal diameter	:	DN 14"	
24	Attacchi - Connections	:	ANSI 150#RF - WAFER	
25				
26	<b>Accessori - Accessoires</b>			
27	N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa			
28	della valvola.			
29	N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of			
30	valve.			
31	Costruttore - Manufacturer	:	See sheet 24	
32	Modello - Model	:	See sheet 24	
33				
34	<b>Attuatore - Pneumatic operator</b>			
35	Pressione comando	:	4 - 8 Bar	
36	Control pressure	:		
37	Connessioni pneumatiche	:	1/4" GAS-F ( NAMUR )	
38	Pneumatic connections	:		
39	Costruttore - Manufacturer	:	AUTOMAX	
40	Modello - Model	:	SID 200D	
41				
Note :		<b>PURCHASING DATA</b>		
1) Valve complete of solenoid valve, mounted on pneumatic operator, for technical date see sheet 23		Manufacturer	:	VANESSA
2) Valve complete with junction box, mounted on pneumatic operator, for technical date see sheet 24		Model	:	30000
		Supplier	:	
		Order n°	:	



BALLESTRA s.p.a.  
MILANO (ITALIA)

# INSTRUMENT SPECIFICATION

(1E35-80.014)  
DWG. : 3B45.80.050  
SH. : 23  
REV. : 4  
Code : 3B45KVDFE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

## VALVOLA A SOLENOIDE - SOLENOID VALVE

1	Tipo Type	DOUBLE SOLENOID	<input type="checkbox"/>	2 Vie 2 Way	<input type="checkbox"/>	3 Vie 3 Way	<input type="checkbox"/>	4 Vie 4 Way	<input checked="" type="checkbox"/>	5 Vie 5 Way	
2	Alimentazione Elettrica Power supply	110 V - 50 Hz		Classificazione area Area classification		WATER PROOF					
3	Valvola a 2 vie - in mancanza energia elettrica 2 way valve - on electric failure			<input type="checkbox"/>	Apre Open	<input type="checkbox"/>	Chiude Closed				
4	Valvola a 3/4/5 vie Valve at 3/4/5 ways	Solenoid energizzato Solenoid energized Solenoid disenergizzato Solenoid disengaged	Via Way "A" Via Way "B"	P-A P-B	Aperta Open		Chiusa Closed		Sfiato Vent		
5	Sigla Tag			KY 11.	10A						
6	Servizio Service			AIR TO KV 11.	10A						
7	Dati di processo Process data	Fluido Fluid		INSTRUMENT AIR							
8		Composti corrosivi Corrosive agents		NO					P	S	
9		Temperatura Operating temperature	norm. / max	30 °C					2	E	
10		Pressione Operating pressure	norm. / max			7 bar			P	S	
11		Peso specifico Specific gravity							3	A	
12		Viscosità Viscosity		0,02 Cp					E		
13		Portata Flow rate							S		
14		Tenuta perfetta Tight shut-off									
15		CV calcolato Calculated CV	CV scelto Selected CV					P	4	A	
16		Dimens. corpo Body size	Dimens. sede Port size					E		B	
17		Connessioni e rating Rating and connections		1/4" GAS-F				P	S		
18		Materiale corpo Body material		ALLUMIN.				EA			
19		Materiale sede Seat material		INOX				P		A	
20		Materiale baderna Packing material		NBR				EB		B	
21		Azionata da pilota Pilot operated		NO				S			
22	Access. Access.	Riarmo manuale Manual reset	Operatore manuale Manual operator	NO	YES			P	INLET		
23	Corpo Body	Attacco elettrico Electrical connection		1/2" NPT-F				A	OUTLET		
24		Tipo di contenitore Housing type		IP 65				B	OUTLET		
25		Tropicalizzazione Tropicalization		YES				E	VENT		
Note :				PURCHASING DATA							
				Manufacturer	ASCO JOUCOMATIC						
				Model	EMT G 551 B 302 H0 - 110 / 50						
				Supplier	VANESSA						
				Order n°							



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)

DWG : 3B45.80.050

SH : 24

REV : 4

Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION (FOR VALVE KV 11. *10A*)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41

#### THECNICAL CHARACTERISTICS

Box protection degrre	: IP 66
Material	: ALUMINIUM PRESS. DIE-CASTING
Colour	: BLACK
Electrical execution	: WATERPROOF
Electrical connection	: N° 3 - 1/2" NPT-F

#### COMPLETE WITH THE FOLLOWING COMPONENTS

##### 1. POSITION INDICATOR

Two colours	: RED - CLOSED / GREEN - OPEN
Material	: POLICARBONATE
Mechanically integral with the shaft of the valve	

##### 2. ACTUATING CAMS

With rotation angles from 0 to 90°

##### 3. TERMINAL BOARD

Prewired with N° 9 terminals of 2,5 mm<sup>2</sup>  
Colour

: STANDARD

##### 4. MICROSWITCHES

Will have to be installed in the box and connected to the terminal board N° 2	: PROXIMITY SWITCH
Manufacturer	: PEPPERL + FUCHS
Model	: NCN4 - 12GM - 40Z0 (with led)
Contact Rating	: 0,1 A - 24 V d.c.

Electrical certification

##### 5. FIXING BRACKET OF THE BOX COMPLETE OF THE BOLTS FOR FIXING NAMUR MECHANICAL CONNECTION

Material

: STAINLESS STEEL

Note :

#### PURCHASING DATA

Manufacturer	: AUTOMAX
Model	: WDC0217201 <i>RR/BT</i>
Supplier	: VANESSA
Order n°	:

 <b>BALLESTRA S.p.A.</b> MILANO (ITALIA)	INSTRUMENT SPECIFICATION		(1E35.80.014)	
	CUSTOMER:	SH :	25	DWG : 3B45.80.050
	PLANT: SULPHUREX	REV :	2	
	JOB: 1E35	Code :		3B45KVFDE.xls
<p>Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization</p>				
ON-OFF BUTTERFLY VALVES DOUBLE EFFECT				
1	Caratteristiche generali - General characteristics			
2	Sigla della valvola - Valve tag	:	KV 11.10 B	
3	Linea installazione valvola - Valve installation line	:	14"- AA-11005-206	
4				
5	Tipo valvola - Valve type	:	Farfalla - Butterfly	
6	Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto ( Deve essere prevista anche la possibilità di azionamento manuale ).			
7	Valve with tight shut-off complete with double acting pneumatic actuator ( The possibility of a manual control has to be provided ).			
8				
9				
10				
11				
12				
13	Condizioni di esercizio - Operating conditions			
14	Fluido di processo - Process fluid	:	Regeneration Air	
15	Pressione di esercizio - Operating pressure	:	Norm= 0,04 bar	
16	Temperatura di esercizio - Operating temperature	:	35 / 160 °C	
17				
18				
19				
20				
21				
22				
23				
24				
25				
26	Materiali - Materials			
27	Corpo - Body	:	CARBON STEEL	
28	Farfalla - Butterfly	:	CARBON STEEL	
29	Anello di tenuta metallico - Seal ring metal	:	UNSS 31803 + GRAPHITE	
30				
31				
32				
33				
34	Dimensioni - Size and rating			
35	Diametro nominale - Nominal diameter	:	DN 14"	
36	Attacchi - Connections	:	ANSI 150#RF - WAFER	
37				
38				
39				
40				
41				
Note:		PURCHASING DATA		
1) Valve complete of solenoid valve, mounted on pneumatic operator, for technical date see sheet 26		Manufacturer	:	VANESSA
2) Valve complete with junction box, mounted on pneumatic operator, for technical date see sheet 27		Model	:	30000
		Supplier	:	
		Order n°	:	



BALLESTRA s.p.a.  
MILANO (ITALIA)

# INSTRUMENT SPECIFICATION

(1E35.80.014)

DWG. : 3B45.80.050

SH. : 26

REV. : 4

Code : 3B45KVDFE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

## VALVOLA A SOLENOIDE - SOLENOID VALVE

1	Tipo Type	DOUBLE SOLENOID	<input type="checkbox"/>	2 Vie 2 Way	<input type="checkbox"/>	3 Vie 3 Way	<input type="checkbox"/>	4 Vie 4 Way	<input checked="" type="checkbox"/>	5 Vie 5 Way	
2	Alimentazione Elettrica Power supply	110 V - 50 Hz		Classificazione area Area classification		WATER PROOF					
3	Valvola a 2 vie - in mancanza energia elettrica 2 way valve - on electric failure			<input type="checkbox"/>	Apre Open	<input type="checkbox"/>	Chiude Closed				
4	Valvola a 3/4/5 vie Valve at 3/4/5 ways	Solenoid energizzato Solenoid energized	Via Way "A"	P-A	Aperta Open		Chiusa Closed		Sfiato Vent		
		Solenoid disenergizzato Solenoid disenergized	Via Way "B"	P-B	Aperta Open		Chiusa Closed		Sfiato Vent		
5	Sigla Tag			KY 11.	10 B						
6	Servizio Service			AIR TO KV 11.	10 B						
7	Dati di processo Process data	Fluido Fluid		INSTRUMENT AIR							
8		Composti corrosivi Corrosive agents		NO					P	E	
9		Temperatura Operating temperature	norm. / max	30 °C					S		
10		Pressione Operating pressure	norm. / max					P	2		
11		Peso specifico Specific gravity	norm. / max		7 bar						
12		Viscosità Viscosity						P	3	A	
13		Portata Flow rate		0,02 Cp						E	
14		Tenuta perfetta Tight shut-off						S			
15		CV calcolato Calculated CV	CV scelto Selected CV					P	4	A	
16		Dimens. corpo Body size	Dimens. sede Port size					E		B	
17		Connessioni e rating Rating and connections		1/4" GAS-F				S			
18		Materiale corpo Body material		ALLUMIN.				EA			
19		Materiale sede Seat material		INOX				P	5	A	
20		Materiale baderna Packing material		NBR				P		B	
21		Azionata da pilota Pilot operated		NO				EB			
22	Access. Access.	Riarmo manuale Manual reset	Operatore manuale Manual operator	NO	YES			S			
23	Corpo Body	Attacco elettrico Electrical connection		1/2" NPT-F				P	INLET		
24		Tipo di contenitore Housing type		IP 65				A	OUTLET		
25		Tropicalizzazione Tropicalization		YES				B	OUTLET		
								E	VENT		
Note :				PURCHASING DATA							
				Manufacturer	ASCO JOUCOMATIC						
				Model	EMTG 551 B 302 10-10/50						
				Supplier	VANESSA						
				Order n°							



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)  
DWG : 3B45.80.050  
SH : 27  
REV : 4  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION (FOR VALVE KV 11.10B)

1	THECNICAL CHARACTERISTICS	
2	Box protection degrre	: IP 66
3	Material	: ALUMINIUM PRESS. DIE-CASTING
4	Colour	: BLACK
5	Electrical execution	: WATERPROOF
6	Electrical connection	: N° 3 - 1/2" NPT-F
7	COMPLETE WITH THE FOLLOWING COMPONENTS	
8	1. POSITION INDICATOR	
9	Two colours	: RED - CLOSED / GREEN - OPEN
10	Material	: POLICARBONATE
11	Mechanically integral with the shaft of the valve	
12	2. ACTUATING CAMS	
13	With rotation angles from 0 to 90°	
14	3. TERMINAL BOARD	
15	Prewired with N° 9 terminals of 2,5 mm <sup>2</sup>	
16	Colour	: STANDARD
17	4. MICROSWITCHES	
18	Will have to be installed in the box and connected to the terminal board N° 2	: PROXIMITY SWITCH
19	Manufacturer	: PEPPERL + FUCHS
20	Model	: NCN4 - 12GM - 40Z0 (with led)
21	Contact Rating	: 0,1 A - 24 V d.c.
22	Electrical certification	
23	5. FIXING BRACKET OF THE BOX COMPLETE OF THE BOLTS FOR FIXING NAMUR MECHANICAL CONNECTION	
24	Material	: STAINLESS STEEL
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		

Note :	PURCHASING DATA
	Manufacturer : AUTOMAX
	Model : WDC0217201
	Supplier : VANESSA
	Order n° : RR/BT



BALLESTRA S.p.A.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)

DWG : 3B45.80.050

SH : 28

REV : 2

Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

### ON-OFF BUTTERFLY VALVES DOUBLE EFFECT

1	Caratteristiche generali - General characteristics	
2	• Sigla della valvola - Valve tag	: KV 11.11
3	Linea installazione valvola - Valve installation line	: 14" - AH - 11009 - 209
4	• Tipo valvola - Valve type	: Farfalla - Butterfly
5	Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto ( Deve essere prevista anche la possibilità di azionamento manuale ).	
6	Valve with tight shut-off complete with double acting pneumatic actuator ( The possibility of a manual control has to be provided ).	
7	• Condizioni di esercizio - Operating conditions	
8	Fluido di processo - Process fluid	: Regeneration Air
9	Pressione di esercizio - Operating pressure	: Norm= 0,04 bar
10	Temperatura di esercizio - Operating temperature	: 35 / 160 °C
11	• Materiali - Materials	
12	Corpo - Body	: CARBON STEEL
13	Farfalla - Butterfly	: CARBON STEEL
14	Anello di tenuta metallico - Seal ring metal	: UNSS 31803 + GRAPHITE
15	• Dimensioni - Size and rating	
16	Diametro nominale - Nominal diameter	: DN 14"
17	Attacchi - Connections	: ANSI 150#RF - WAFER
18	• Accessori - Accessoires	
19	N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa della valvola.	
20	N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of valve.	
21	Costruttore - Manufacturer	: See sheet 30
22	Modello - Model	: See sheet 30
23	• Attuatore - Pneumatic operator	
24	Pressione comando	: 4 - 8 Bar
25	Control pressure	
26	Connessioni pneumatiche	: 1/4" GAS-F ( NAMUR )
27	Pneumatic connections	
28	Costruttore - Manufacturer	: AUTOMAX
29	Modello - Model	: SID 200D
30	Note :	
31	1) Valve complete of solenoid valve, mounted on pneumatic operator, for technical date see sheet 29	PURCHASING DATA
32	2) Valve complete with junction box, mounted on pneumatic operator, for technical date see sheet 30	
33		
34		
35		
36		
37		
38		
39		
40		
41		

### PURCHASING DATA

Manufacturer	:	VANESSA
Model	:	30000
Supplier	:	
Order n°	:	



BALLESTRA S.p.A.  
MILANO (ITALIA)

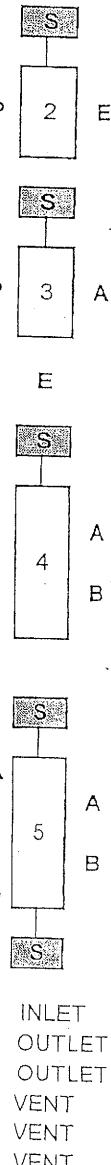
## INSTRUMENT SPECIFICATION

(1E35.82 014)  
DWG. : 3B45.80.050  
SH. : 29  
REV. : 4  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

### VALVOLA A SOLENOIDE - SOLENOID VALVE

1	Tipo Type	DOUBLE SOLENOID	<input type="checkbox"/> 2 Vie 2 Way	<input type="checkbox"/> 3 Vie 3 Way	<input type="checkbox"/> 4 Vie 4 Way	<input checked="" type="checkbox"/> 5 Vie 5 Way
2	Alimentazione Elettrica Power supply	110 V - 50 Hz	Classificazione area Area classification	WATER PROOF		
3	Valvola a 2 vie - in mancanza energia elettrica 2 way valve - on electric failure		<input type="checkbox"/> Apre Open	<input type="checkbox"/> Chiude Closed		
4	Valvola a 3/4/5 vie Valve at 3/4/5 ways	Solenoid energizzato Solenoid energized Solenoid disenergizzato Solenoid disenergized	Via Way "A" Via Way "B"	P-A Aperta Open P-B Aperta Open	Chiusa Closed Chiusa Closed	Sfiato Vent Sfiato Vent
5	Sigla Tag	KY 11. 11				
6	Servizio Service	AIR TO KV 11.. 11				
7	Dati di processo Process data	Fluido Fluid	INSTRUMENT AIR			
8		Composti corrosivi Corrosive agents	NO			
9		Temperatura norm. / max Operating temperature norm. / max	30 °C			
10		Pressione norm. / max Operating pressure norm. / max		7 bar		
11		Peso specifico Specific gravity				
12		Viscosità Viscosity	0,02 Cp			
13		Portata Flow rate				
14		Tenuta perfetta Tight shut-off				
15		CV calcolato Calculated CV	CV scelto Selected CV			
16		Dimens. corpo Body size	Dimens. sede Port size			
17		Connessioni e rating Rating and connections	1/4" GAS-F			
18		Materiale corpo Body material	ALLUMIN.			
19		Materiale sede Seat material	INOX			
20		Materiale baderna Packing material	NBR			
21		Azionata da pilota Pilot operated	NO			
22	Access. Access.	Riarmo manuale Manual reset	Operatore manuale Manual operator	NO	YES	
23	Corpo Body	Attacco elettrico Electrical connection	1/2" NPT-F			
24		Tipo di contenitore Housing type	IP 65			
25		Tropicalizzazione Tropicalization	YES			
Note :	PURCHASING DATA					
	Manufacturer	ASCO JOUCOMATIC				
	Model	EMTG 551 B302 110 - 110/50				
	Supplier	VANESSA				
	Order n°					





BALLESTRA S.p.A.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)

DWG : 3B45.80.050

SH : 30

REV : 4

Code : 3B45KVDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION (FOR VALVE KV 11.11)

1	THECNICAL CHARACTERISTICS	
2	Box protection degrre	: IP 66
3	Material	: ALUMINIUM PRESS. DIE-CASTING
4	Colour	: BLACK
5	Electrical execution	: WATERPROOF
6	Electrical connection	: N° 3 - 1/2" NPT-F
7	COMPLETE WITH THE FOLLOWING COMPONENTS	
8	1. POSITION INDICATOR	
9	Two colours	: RED - CLOSED / GREEN - OPEN
10	Material	: POLICARBONATE
11	Mechanically integral with the shaft of the valve	
12	2. ACTUATING CAMS	
13	With rotation angles from 0 to 90°	
14	3. TERMINAL BOARD	
15	Prewired with N° 9 terminals of 2,5 mm <sup>2</sup>	
16	Colour	: STANDARD
17	4. MICROSWITCHES	
18	Will have to be installed in the box and connected to the terminal board N° 2	: ITEM : ZS 11.11 o/c
19	Manufacturer	: PROXIMITY SWITCH
20	Model	: PEPPERL + FUCHS
21	Contact Rating	: NCN4 - 12GM - 40Z0 (with led)
22	Electrical certification	: 0,1 A - 24 V d.c.
23	5. FIXING BRACKET OF THE BOX	
24	COMPLETE OF THE BOLTS FOR	
25	FIXING NAMUR MECHANICAL CONNECTION	
26	Material	: STAINLESS STEEL

Note :

PURCHASING DATA		
Manufacturer	:	AUTOMAX
Model	:	WDC0217201 RQ/BT
Supplier	:	VANESSA
Order n°	:	

 <b>BALLESTRA s.p.a.</b> MILANO (ITALIA)	INSTRUMENT SPECIFICATION		(1E35.80.014) <sup>1</sup>	
	CUSTOMER:	SH :	31	DWG : 3B45.80.050
	PLANT: SULPHUREX	REV :	2	
	JOB: 1E35	Code :		3B45KVFDE.xls
Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta. We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization				
ON-OFF BUTTERFLY VALVES DOUBLE EFFECT				
1	<b>Caratteristiche generali - General characteristics</b>			
2	• Sigla della valvola - Valve tag	:	KV 11.12	
3	Linea installazione valvola - Valve installation line	:	14"- AH-11025- 209	
4	• Tipo valvola - Valve type	:	Farfalla - Butterfly	
5	Valvola a tenuta perfetta completa di attuatore pneumatico a doppio effetto ( Deve essere prevista anche la possibilità di azionamento manuale ).			
6	Valve with tight shut-off complete with double acting pneumatic actuator ( The possibility of a manual control has to be provided ).			
7	• Condizioni di esercizio - Operating conditions			
8	Fluido di processo - Process fluid	:	Regeneration Air	
9	Pressione di esercizio - Operating pressure	:	Norm= 0,04 bar	
10	Temperatura di esercizio - Operating temperature	:	35 / 160 °C	
11	• Materiali - Materials			
12	Corpo - Body	:	CARBON STEEL	
13	Farfalla - Butterfly	:	CARBON STEEL	
14	Anello di tenuta metallico - Seal ring metal	:	UNSS 31803 + GRAPHITE	
15	• Dimensioni - Size and rating			
16	Diametro nominale - Nominal diameter	:	DN 14"	
17	Attacchi - Connections	:	ANSI 150#RF - WAFER	
18	• Accessori - Accessoires			
19	N° 2 Finecorsa montati sull'operatore pneumatico per segnalare le posizioni aperta e chiusa della valvola.			
20	N° 2 Limit switches mounted on pneumatic operator to signal the positions open-closed of valve.			
21	Costruttore - Manufacturer	:	See sheet 33	
22	Modello - Model	:	See sheet 33	
23	• Attuatore - Pneumatic operator			
24	Pressione comando	:	4 - 8 Bar	
25	Control pressure			
26	Connessioni pneumatiche	:	1/4" GAS-F ( NAMUR )	
27	Pneumatic connections			
28	Costruttore - Manufacturer	:	AUTOMAX	
29	Modello - Model	:	SID 200D	
30	Note :	PURCHASING DATA		
31	1) Valve complete of solenoid valve, mounted on pneumatic operator, for technical date see sheet 32	Manufacturer	:	VANESSA
32	2) Valve complete with junction box, mounted on pneumatic operator, for technical date see sheet 33	Model	:	30000
33		Supplier	:	
34		Order n°	:	



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.014)  
DWG. : 3B45.80.050  
SH. : 32  
REV. : 4  
Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

### VALVOLA A SOLENOIDE - SOLENOID VALVE

1	Tipo Type	DOUBLE SOLENOID	<input type="checkbox"/>	2 Vie 2 Way	<input type="checkbox"/>	3 Vie 3 Way	<input type="checkbox"/>	4 Vie 4 Way	<input checked="" type="checkbox"/>	5 Vie 5 Way				
2	Alimentazione Elettrica Power supply	110 V - 50 Hz	Classificazione area Area classification						WATER PROOF					
3	Valvola a 2 vie - in mancanza energia elettrica 2 way valve - on electric failure			<input type="checkbox"/>	Apre Open	<input type="checkbox"/>	Chiude Closed							
4	Valvola a 3/4/5 vie Valve at 3/4/5 ways	Solenoid energizzato Solenoid energized	Via Way	"A"	P-A	Aperta Open	<input type="checkbox"/>	Chiusa Closed	Sfiato Vent					
		Solenoid disenergizzato Solenoid disengaged	Via Way	"B"	P-B	Aperta Open	<input type="checkbox"/>	Chiusa Closed	Sfiato Vent					
5	Sigla Tag			KY 11. 12										
6	Servizio Service			AIR TO KV 11. 12										
7	Dati di processo Process data			INSTRUMENT AIR										
8							NO							
9							30 °C							
10								7 bar						
11														
12														
13							0,02 Cp							
14														
15														
16														
17							1/4" GAS-F							
18							ALLUMIN.							
19							INOX							
20							NBR							
21				NO										
22	Access. Access.	Riarmo manuale Manual reset	Operatore manuale Manual operator	NO	YES									
23	Corpo Body			1/2" NPT-F										
24				IP 65										
25				YES										
Note :				PURCHASING DATA										
				Manufacturer : ASCO JOUCOMATIC Model : ENTGS51B30210-110/50 Supplier : VANESSA Order n° :										



BALLESTRA s.p.a.  
MILANO (ITALIA)

## INSTRUMENT SPECIFICATION

(1E35.80.01a)

DWG : 3B45.80.050

SH : 33

REV : 4

Code : 3B45KVFDE.xls

Ci riserviamo la proprietà a termine di legge di questo documento con divieto di riprodurlo anche in parte o di renderlo a terzi senza nostra autorizzazione scritta.  
We reserve the ownership under the law of this document with prohibition of even partial reproduction and to make it known to third persons without our written authorization.

### BOX MICRO - SWITCHES FOR SIGNALING VALVE POSITION (FOR VALVE KV 11.12)

1  
2  
3  
4  
5  
6  
7  
8  
9  
10  
11  
12  
13  
14  
15  
16  
17  
18  
19  
20  
21  
22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41

#### THECNICAL CHARACTERISTICS

Box protection degrre	: IP 66
Material	: ALUMINIUM PRESS. DIE-CASTING
Colour	: BLACK
Electrical execution	: WATERPROOF
Electrical connection	: N° 3 - 1/2" NPT-F

#### COMPLETE WITH THE FOLLOWING COMPONENTS

##### 1. POSITION INDICATOR

Two colours	: RED - CLOSED / GREEN - OPEN
Material	: POLICARBONATE
Mechanically integral with the shaft of the valve	

##### 2. ACTUATING CAMS

With rotation angles from 0 to 90°

##### 3. TERMINAL BOARD

Prewired with N° 9 terminals of 2,5 mm<sup>2</sup>  
Colour

: STANDARD

##### 4. MICROSWITCHES

Will have to be installed in the box  
and connected to the  
terminal board N° 2  
Manufacturer

ITEM : ZS 11.12 o/c

: PROXIMITY SWITCH

: PEPPERL + FUCHS

: NCN4 - 12GM - 40Z0 (with led)

: 0,1 A - 24 V d.c.

Model

Contact Rating

Electrical certification

##### 5. FIXING BRACKET OF THE BOX

COMPLETE OF THE BOLTS FOR  
FIXING NAMUR MECHANICAL  
CONNECTION

Material

: STAINLESS STEEL

Note :

#### PURCHASING DATA

Manufacturer	: AUTOMAX
Model	: WDC021720
Supplier	: VANESSA
Order n°	: 1RR/BT