

8 Control Valve R



INFORMATION

Flow control is a major aspect of beverage production. Durable, high-grade valves are needed for typical operations such as redirection, shutting off of product flows and tank discharge. To adjust processes exactly and fast, reliable control valves are necessary.

Once again, careful attention must be paid to the seal, because the seal configuration and clearance have a major impact on the safety and reliability of the production process. Long service life and ease of replacement are other important factors to take into consideration during seal selection.

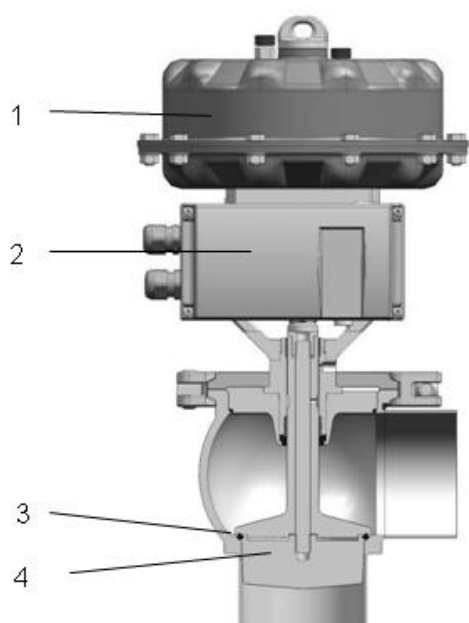
EVOGUARD control valves are designed to deliver high performance during day-to-day operation.

To cover a lot of control processes, the equal percentage cone is standard. The allocation of the control valve results from nominal diameter, KV value and seat diameter.

The metal stop on the valve disk and the positioning of the seal prevent excessive stress on the seal. Optimal compliance with hygienic design is another outstanding feature of the valves.

Design features of modular control valves

- Seal geometry optimized for all applicable process conditions
- Two-piece threaded valve disk with defined clearance for the seal enhances ease of installation
- Diaphragm actuator size matched to product pressure
- Allocation according to nominal diameter, KV value and seat diameter



- 1 Diaphragm actuator
- 2 Positioner
- 3 Metal stop
- 4 Two-piece valve disk, threaded

Seat Ø	Value		Stroke 20			Stroke 30		
	Kvs m ³ /h	Cvs US gal/min	DN25	DN40	DN50	DN65	DN80	DN100
3	0.1	0.116	x					
	0.16	0.186						
5	0.25	0.29	x					
	0.4	0.46						
10	0.63	0.73	x	x				
	1	1.16						
	1.6	1.86						
	2.5	2.9						
19	4	4.64	x	x	x			
	6.3	7.31						
26	10	11.6	x	x	x			
38	16	18.56		x	x	x	x	x
	25	29						
50	32	37.12			x	x	x	x
	40	46.4						
66	63	73.1				x	x	x
81	100	116					x	x
100	160	185.6						x

TECHNICAL DATA

Pressures

Product pressure	PN 87 psi (6 bar), 145 psi (10 bar) / vacuum -13.8 psi (-0.95 bar) Further pressures available upon request
Housing	PN 360 psi (25 bar)
Control air pressure	min. 87 psi (6 bar) - max. 115 psi (8 bar)

Material

Produktberührt	1.4404 / AISI 316L
Nicht produktberührt	1.4301
Dichtung	EPDM / FDA Other materials available upon request

Surface

With product contact	$R_a \leq 0.8 \mu$
Without product contact	$R_a \leq 1.6 \mu$

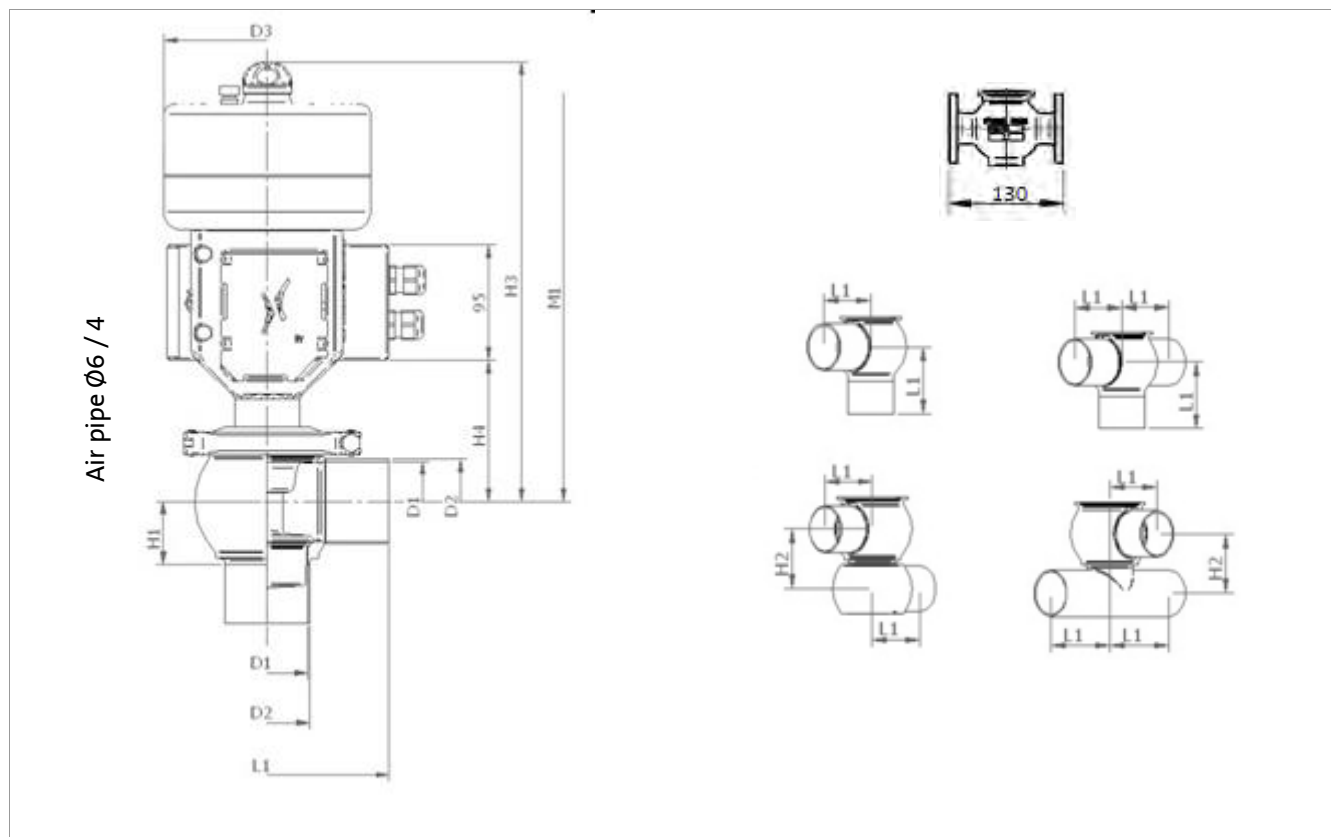
Designs

Housing versions	
Actuator	Pneumatic diaphragm actuator NC / NO
Additional equipment	Positioner set value 4 – 20 mA
Configuration	Download inquiry form: https://www.evoguard.com/en/why-evoguard/downloads-and-press.php

According to legal requirements
EU Pressure Equipment Directive 2014/68/EU
EU Machinery Directive 2006/42/EC
Design check by TÜV Süd



CONTROL VALVE R WWV



Dimensions

DN	ØD1 mm	ØD2 mm	ØD3 PN10 mm	L1 mm	H1 mm	H2 mm	H3 mm	H4 mm	M1 mm
25	26	29	170	65	31	48	339	93	429
40	38	41	170	75	37	60	349	103	455
50	50	53	170	85	41	70	355	109	466
65	66	70	228	100	52	89	365	116	504
80	81	85	334	110	60	105	441	131	596
100	100	104	334	120	70	124	454	145	637
125									
150									

Weight

DN	1-0 PN10 kg	1-3-0 kg	1-6-8 kg	1-3-6-8 kg
25	12,4			
40	16,3			
50	16,8			
65	23,1			
80	51,5			
100	56,8			
125	74,5			
150				

Housing: 1-0
1-3-0
1-6-8
1-3-6-8

Actuator: NC (spring closing / air opening)
NO (air closing / spring opening)

Seal material: E (EPDM)
F (FKM)
H (HNBR)

Example for Description :

Control Valve R DN80 KV63 10 NC E

KV = 4
10
63
etc.

Diameter

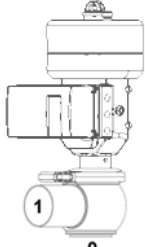
Type: R Control Valve

CONTROL VALVE R WWV PRODUCT PRESSURE 6 BAR

KV value max. corresponding to nominal diameter, positioner Siemens Sipart PS2

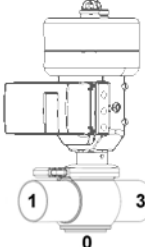
1-0

1.4404 / AISI 316L

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

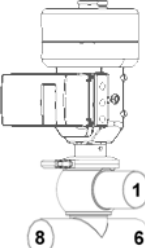
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1.4404 / AISI 316L

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

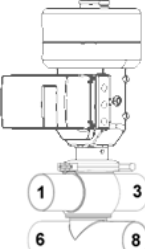
1-6-8

1.4404 / AISI 316L

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

1-3-6-8

1.4404 / AISI 316L

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

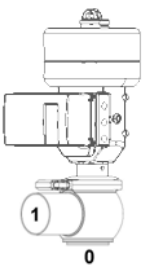
Further types available upon request

CONTROL VALVE R WWV PRODUCT PRESSURE 10 BAR

KV value max. corresponding to nominal diameter, positioner Siemens Sipart PS2

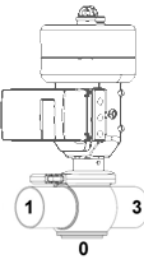
1-0

1.4404 / AISI 316L

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

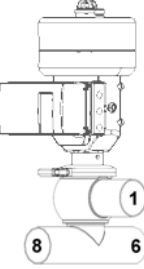
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1.4404 / AISI 316L

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

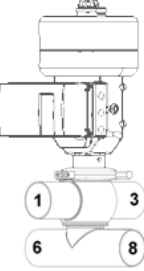
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1.4404 / AISI 316L

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

1-3-6-8

1.4404 / AISI 316L

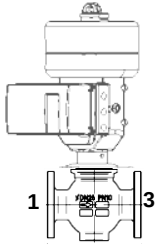
	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

Further types available upon request

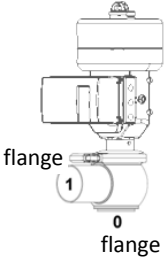
GAS CONTROL VALVES R OVO PRODUCT PRESSURE 10 BAR

KV value max. corresponding to nominal diameter, positioner Siemens Sipart PS2

OVO 1-3 1.4408

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25/KV0,63	0903368977		
	25/KV1	0903368978		
	25/KV1,6	0903368979		
	25/KV2,5	0903369030		
	25/KV4	0903369031		
	25/KV10	0903611550		

OVO 1-0 1.4404 / AISI 316L

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	10/KV0,01	0902885896		
	10/KV0,025	0904381407		
	10/KV0,04	0904381490		
	10/KV0,1	0904264951		
	10/KV0,16	0903975844		
	10/KV0,25	0903559980		
	10/KV0,63	0902858498		0904230765
	10/KV1	0904264952		0904095443

Further types available upon request

SPARE PARTS CONTROL VALVE R

Seal kit with product contact, KV 0.01 to KV 2.5

	DN	EPDM	HNBR	FKM
		Material no.	Material no.	Material no.
	25	0903425799	0903966831	0903425840
	40	0903966830	0903967323	0903966792
	50			
	65			
	80			
	100			
	125			
	150			

Seal kit with product contact, KV 4 to KV 10

	DN	EPDM	HNBR	FKM
		Material no.	Material no.	Material no.
	25			
	40	0903425841	0903967253	0903425842
	50			
	65			
	80			
	100			
	125			
	150			

Seal kit with product contact, KV 16 to KV 40

	DN	EPDM	HNBR	FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65	0903425843	0903967325	0903425844
	80			
	100	0903425845	0903967328	0903425847
	125			
	150			

Seal kit with product contact, KV 63

	DN	EPDM	HNBR	FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80	0903425848	0903967381	0903425849
	100			
	125			
	150			

Seal kit with product contact, KV 100

DN	EPDM	HNBR	FKM
	Material no.	Material no.	Material no.
25			
40			
50			
65			
80	0903425850	0903967383	0903425851
100			
125			
150			

Seal kit with product contact, KV 160

DN	EPDM	HNBR	FKM
	Material no.	Material no.	Material no.
25			
40			
50			
65			
80			
100	0903425852	0903967385	0903425853
125	0903425859	0903967387	0903425860
150			

Seal kit with product contact, KV 250

DN	EPDM	HNBR	FKM
	Material no.	Material no.	Material no.
25			
40			
50			
65			
80			
100			
125	0903425854	0903967388	0903425855
150			

Seal kit with product contact, KV 400

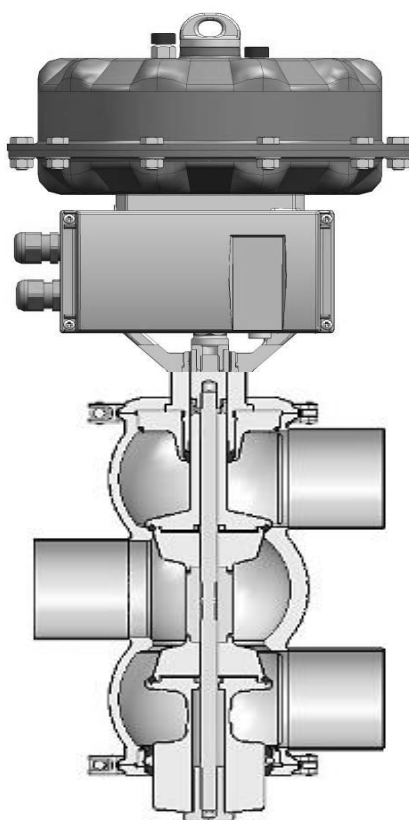
DN	EPDM	HNBR	FKM
	Material no.	Material no.	Material no.
25			
40			
50			
65			
80			
100			
125			
150	0903425856	0903967404	0903425857

CONTROL DIVERT VALVE RC PRODUCT PRESSURE 10 BAR

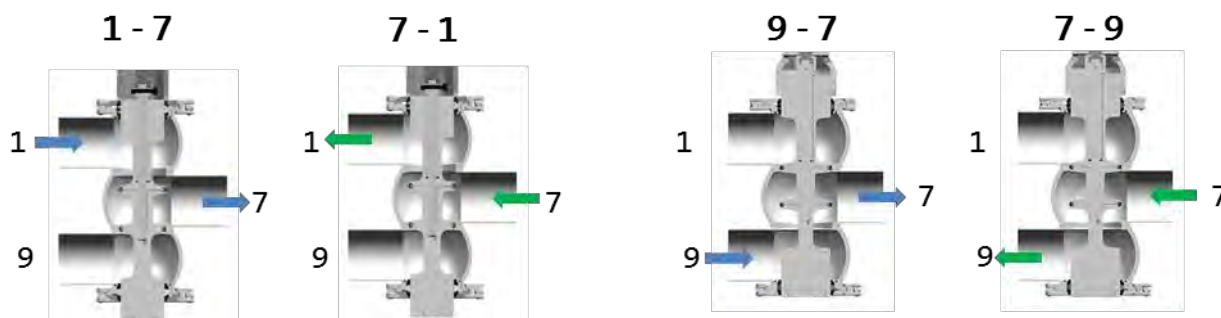
Design features of modular control divert valves

- Variable path direction
- Diaphragm actuator size matched to product pressure
- Allocation according to nominal diameter, KV value and seal diameter
- One-piece housing, free from dead area, drainable
- Seal geometry optimized for all applicable process conditions
- Threaded valve disk with defined clearance for the seal enhances ease of installation

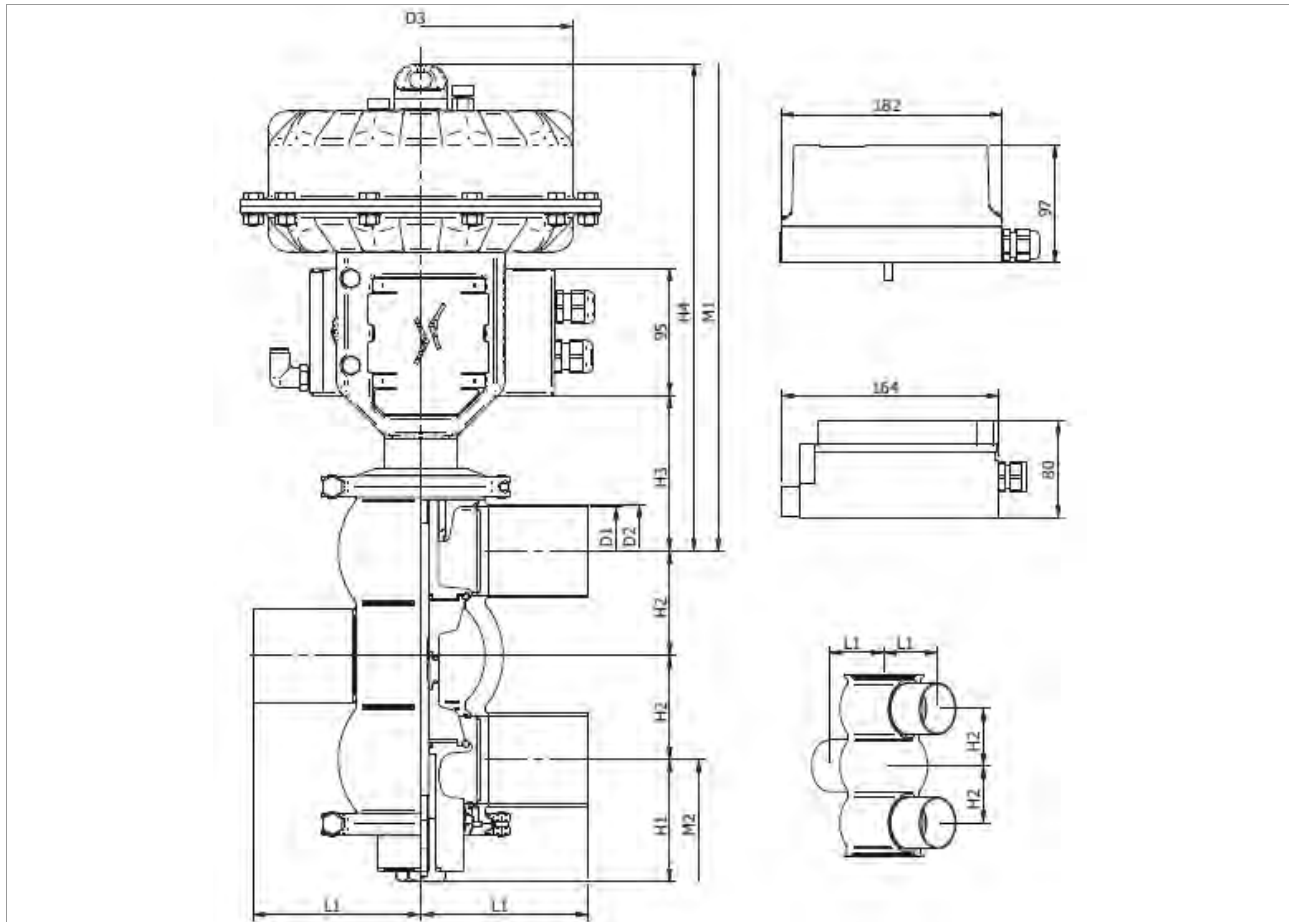
Function NC



Path direction



CONTROL DIVERT VALVE RC DN

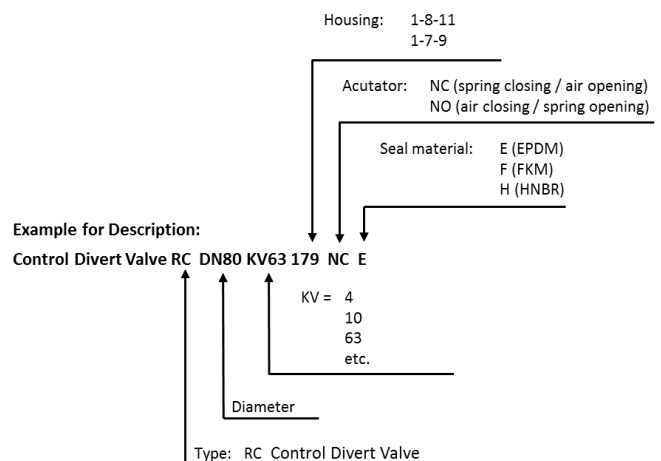


Dimensions

DN	ØD1 mm	ØD2 mm	ØD3 mm	L1 mm	H1 mm	H2 mm	H3 mm	H4 mm	M1 mm	M2 mm	Stroke mm
25											
40	38	41	170	90	62	52	102	350	555	142	12
50	50	53	170	90	78	62	109	355	590	154	18
65	66	70	228	125	92	78	117	365	656	184	22
80	81	85	228	125	104	93	124	372	727	227	25
100	100	104	228	125	124	112	138	386	790	252	28
125											
150											

Weight

DN	1-8-11 kg	1-7-9 kg	kg	kg
25				
40	19,2			
50	19,7			
65	28,8			
80	34,4			
100	44,7			
125				
150				

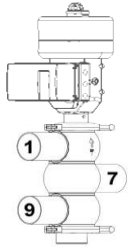


CONTROL DIVERT VALVE RC PRODUCT PRESSURE 10 BAR

KV value max. corresponding to nominal diameter, positioner Siemens Sipart PS2

1-7-9

1.4404 / AISI 316L

	DN	- EPDM	- HNBR	- FKM
		Material no.	Material no.	Material no.
	25			
	40			
	50			
	65			
	80			
	100			
	125			
	150			

SPARE PARTS CONTROL DIVERT VALVE RC

Seal kit with product contact

	DN	EPDM	HNBR	FKM
		Material no.	Material no.	Material no.
	25			
	40	0904215329	0904220024	0904220022
	50	0904215329	0904220024	0904220022
	65	0904215500	0904220028	0904220026
	80	0904215501	0904220083	0904220080
	100	0904215504	0904220114	0904220105
	125			
	150			

Bearing set

	DN	
		Material no.
	25	
	40	0904215505
	50	0904215505
	65	0904215584
	80	0904215585
	100	0904215587
	125	
	150	

SPARE PARTS DIAPHRAGM ACTUATOR

Diaphragm for diaphragm actuator

	TYPE	NBR
	813	Material no.
	MF I	0904201142
	MF III	0904201144

Sealing and bearing set for diaphragm actuator

	TYPE	NBR
	813	Material no.
	MF I	0904202629
	MF III	0904202289

Positioner without mounting parts

	DN	Material no.
	Siemens Sipart PS2	0902798583
	Siemens Sipart PS 2 HART	0903626760

