Semphil IEE Belgium

Flow Control and Valve Maintenance Solutions

Process Valves
Control Valves
Actuators and Positioners

High Performance Pinch Valves for abrasive powders, minerals, and liquids
Knife Gate Valves
Air Release Valves

Steam Traps
Boiler Equipments

API 6A Valves
Spare Parts
Valve Maintenance and
Test equipments
Separators, Column Internals, Screen Filtration

Introduction

Semphil IEE Belgium

Welcome to our new catalogue !

Designed to be browsed quickly, it offers a handy selection tool that gives an overview of our range of products and services, as well as directions to send us the most comprehensive price request possible. To make it easier for you, we provide questionnaires that will allow you to process your requests even faster. Don't hesitate to ask us for copies in electronic format via **sales@semphil.be.**

A visit to your facilities will allow us to pinpoint exactly your needs and requests.
We strive to be present for our customers from the **selection of the valve** to its **installation**. We are also at your side for **the maintenance management of new and old equipment**

Contents

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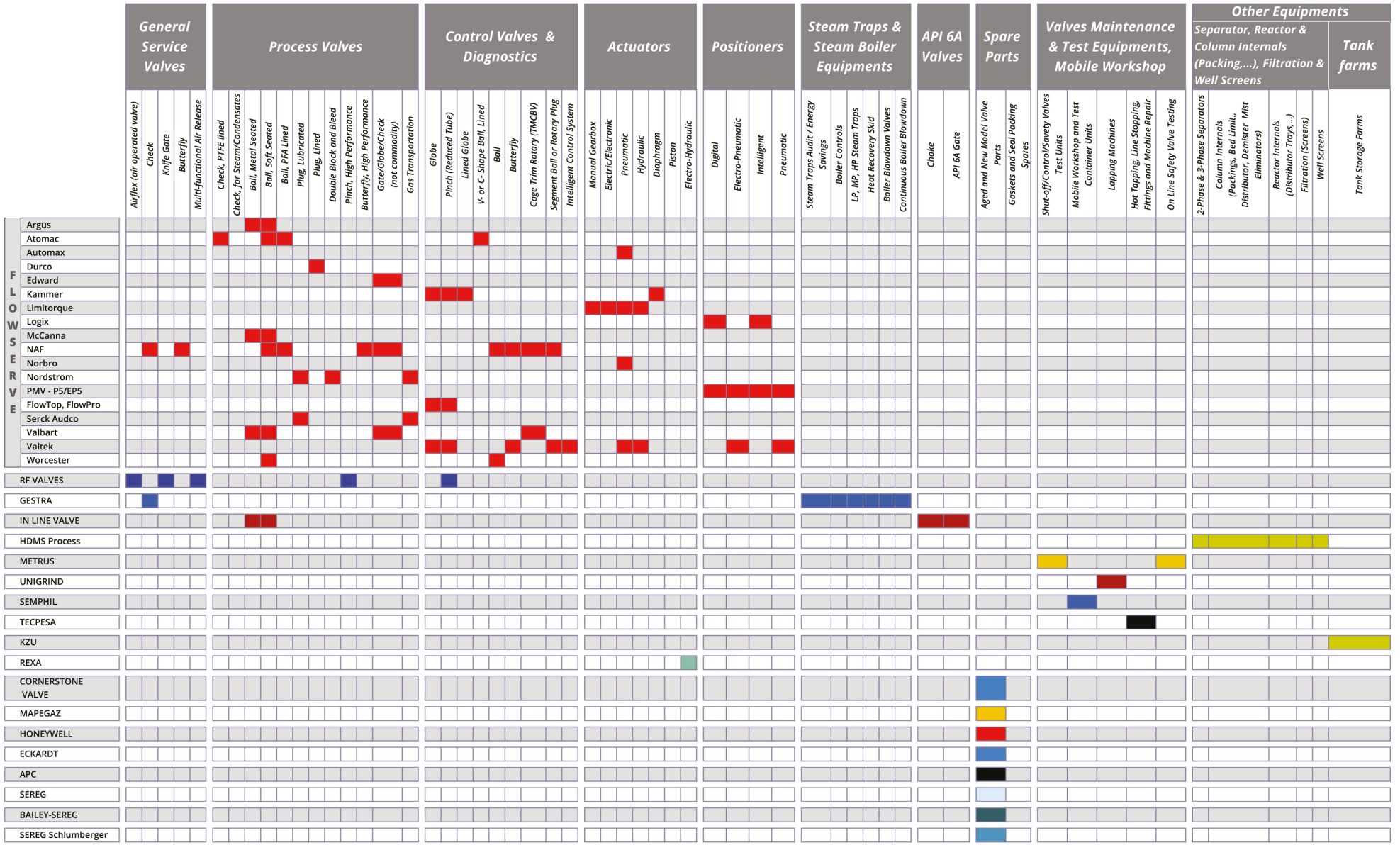


« Need a 4-inch valve ? »

1 Process Conditions?

- **PROCESS FLUID :** water, steam, acids, slurry, cryogenic fluid,...(1)
- **STATE/PHASE :** gas, liquid, powder, solids, multiphase (1)
- **VISCOSITY (1)**
- **DENSITY – MOLECULAR WEIGHT (1)**
- **VAPOUR PRESSURE (1)**
- **WORKING PRESSURE** min., max., (1)
- **INLET TEMPERATURE** min., max.. (1)
- **FLOW RATE** min., max., nominal (1)
- **DISCHARGE FLOW RATE (2)**
- **INLET PRESSURE AND PRESSURE DROP (1)**
- **MAX DIFFERENTIAL PRESSURE AT CLOSING (3)**
- **MOST FREQUENT VALVE POSITION AND NUMBER OF CYCLES (3)**

(1) Important data for sizing automatic/self functioning devices (control valves, check valves, discharge valves, safety valves)
(2) Steam traps, safety valves
(3) Important data for actuator sizing

2 Function? Valve type - Valve Characteristics

- **SHUT-OFF :** ball, gate, plug, butterfly, knife gate, pinch valve, gas transportation valves
- **THROTTLING :** globe (linear characteristics), butterfly (mix of quick opening and linear characteristics)
- **NON-RETURN :** dual plate, ball check, disc check valve
- **CONTROL :** globe (linear, equal %), segment ball (modified linear or equal % through electronic cam), rotary plug (nearly linear), eccentric butterfly valve (modified linear)
- **SAFETY/PROTECTION :** ESD valve, double block and bleed, safety valve, air release valve.
- **AUTOMATIC DRAIN :** steam trap for steam circuit.

3 Size, Class - Materials - Face to face End connection Type - Actuator Type

- **SIZE** (nominal size in inch or DN in mm)
- **FULL OR REDUCED BORE**
- **CLASS OR PN** (pressure rating)
- **FACE TO FACE** acc. to EN/NF/ANSI
- **MATERIALS SELECTION CAST** iron, carbon steel, stainless steel, PFA lining, duplex, ceramic, hastelloy, Uranus B6, elastomeric ...
- **END CONNECTIONS :** flanged, screwed, butt or socket weld, etc.
- **ACTUATOR TYPE :** manual handwheel, lever, manual gearbox, electric, pneumatic, hydraulic, electrohydraulic

4 Environment - Standards - Inspection Plan Certificates - Documentation

- **ENVIRONMENT :** explosive area if applicable , ATEX, FM,...
- **SIL CAPABILITY**
- **LOCATION** coastal, on-shore, off-shore, dust ambiance, desert environment, ...
- **INSPECTION** according to standard Inspection and Test Plan or special procedure (ARH.)
- **TEST STANDARDS,** hydrostatic tests, seat tests, material test certificates, supplementary tests if applicable, EN/NF/DIN/ASME/API standards.
- **STANDARDS :** for design, tests, fire-safe, according to EN/NF/ASME/API/BS
- **FINAL DOCUMENTATION** (test reports, as built drawings, manufacturer file, ...)

These data are not exhaustive, depending on the application we may need further information or a site survey.

« Need a spare part ? »

1 Part Number - Brand and Model Valve Serial Number

- **Part number** from the original manufacturer
- **Brand and model** from the original manufacturer
- **Serial number** from the original valve

These informations are needed for a quick answer from our quotation department.

2 Picture of the valve and its ID plate

- **Picture of a readable identification plate** on the valve together with complete valve picture, either installed or on the ground
- **Part number and order number** from the contractor (if different from the original manufacturer job number)
- **Past and historic order** numbers
- **Drawing number, item from the bill of materials**

3 Study of a replacement valve

- **NEW VALVE**
  If our quotation team is not able to identify the parts after steps 1 and 2, we shall assist you to define a new valve with the necessary data (see « Need a 4-inch valve? »)
- **VALVE REPAIR**
  Our maintenance specialist team can assist you in repairing the valve with the most appropriate solution

4 Depending on the emergency matter : on line replacement

HOT TAPPING – LINE STOPPING

- If it is impossible to shut-down the line or the plant, our engineering team is able to study a replacement of the valve on line without stopping the production.
- Risk assessment and production savings are key factors for the decision of hot tapping.

These data are not exhaustive, depending on the application we may need further information or a site survey.

Process Valves

Ball valves, trunnion mounted or floating ball type

Brands:

Argus, Valbart, Mc Canna, NAF

Sizes:

1/2" to 64", DN 15 to DN 1600

Style and Type:

Floating ball, trunnion mounted, top entry, segment ball, rising stem (Orbit style), subsea, metal seated, soft seated, double block and bleed (DBB) etc.

Pressure Class Range:

Class 150 to 2500, PN20 to PN420, API 2000 to API 10 000

Temperature Range:

-196 °C to 650 °C

- OIL AND GAS
- CHEMICAL
- PETROCHEMICAL
- LNG - CRYOGENIC

See our shutdown valve datasheet sample p17, to help you fill you valve request for quotation.

Process Valves

Ball valves, floating ball, PFA lined or standard body

Brands :

Atomac (Lined), Worcester

Sizes :

1/2" to 14", DN 15 to DN 350

Style and Type :

3-piece and 2-piece body, floating ball, PFA lined, soft seated

Pressure Class Range:

Class 150 (ATOMAC), class 600 (Worcester)

Temperature Range:

200°C (ATOMAC)

-46° C to 315° C (Worcester)

- OIL AND GAS
- CHEMICAL
- PETROCHEMICAL
- LNG - CRYOGENIC

Process Valves

High performance butterfly valve

Brands:

Durco, NAF, Valtek Valdisk

Sizes:

2" to 36", DN 50 to DN 900

Style and Type:

Double or triple eccentric, PFA lined, rubber lined, metal or soft seated

Pressure Class Range:

Class 150 to 2500, PN20 to PN420

Temperature Range:

-196 °C to 820 °C

OIL AND GAS

CHEMICAL

PETROCHEMICAL

Process Valves

High performance gate/globe/check valves for power stations or API 6D pipelines

Brands:

Edward, Anchor Darling, Valbart

Sizes:

1/4" to 34", DN 15 to DN 1600

Style and Type:

Flexible wedge, « slab gate », split wedge, parallel seats, globe, check, nuclear, API 6D standard

Pressure Class Range:

PN 20 to PN 610

Temperature Range:

-29 °C to 816 °C

OIL AND GAS

CHEMICAL

PETROCHEMICAL

POWER

Process Valves
Gas transportation valves

Plug valves

Brands:

Durco, Serck Audco, Nordstrom

Sizes:

1/2" to 30", DN 15 to DN 750

Style and Type :

Non lubricated PFA lined plug for chemical applications, lubricated plug, balanced plug, double isolation and drain for gas transportation

Pressure Class Range :

Série 150 to 2500, API 2000 to API 10000, PN20 to PN420

Temperature Range:

-46 °C to 375 °C

Control Valves

Linear control valves

Brands :

Valtek Mark One, Kämmer, Schmidt FlowTop, Valtek GS

Sizes:

1/4" to 36", DN 6 to DN 900

Style and Type:

Globe, cage trim, micro-flow, severe service, high capacity, lined body

Pressure Class Range:

Class 150 to 2500, PN20 to PN420

Temperature Range:

-196 °C to 815 °C

OIL AND GAS
CHEMICAL
PETROCHEMICAL
LNG - CRYOGENIC

Control Valves

Rotary control valves

Brands:

Maxflo, NAF, Valbart, Valtek, Shearstream

Sizes:

1" to 56", DN 25 to DN 1400

Style and Type:

Rotary plug, cage trim ball for severe service, segment ball

Pressure Class Range:

Class 150 to 2500, PN20 to PN420, API 3000/5000/10000

Temperature Range:

-196 °C to 649 °C

- OIL AND GAS
- CHEMICAL
- PETROCHEMICAL

See our control valve datasheet sample p16, to help you prepare your request for quotations.

Control Valves

Intelligent control System STARPAC

Brands:

Valtek Starpac

Sizes:

Depends on base valve, up to 36" or above.

Style and Type:

Complete control loop package in one valve including sensors, transmitters and control system, with amazing response time of 6 ms. For gas lift application, 15% gas lift savings, up to 20% oil production increase. Also for cryogenic application, cascade loops needing extra speed.

Pressure Class Range:

Class 150 to 2500, PN20 to PN420

Temperature Range:

-196°C to 815°C

- OIL AND GAS
- CHEMICAL
- PETROCHEMICAL
- LNG - CRYOGENIC

Actuators

Electric, pneumatic, hydraulic actuators

Brands :

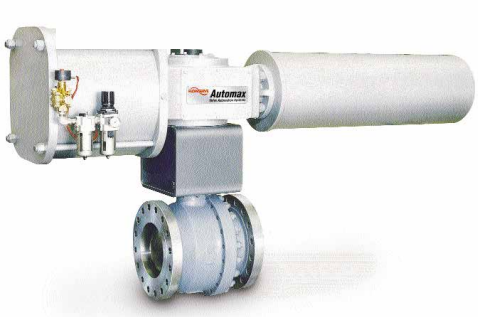
Limitorque, Automax, NAF, NORBRO
Aged or new model valves automation, with all controls and accessories mounted on panel / boxes, complete units, fully tested

Types :

Diaphragm, piston, electric, rack and pinion, scotch and yoke, hydraulic and electro-hydraulic.

Torque Range:

Up to 550 kNm, maximum supply pressure up to 105 barg (hydraulic), up to 12 barg (pneumatic)



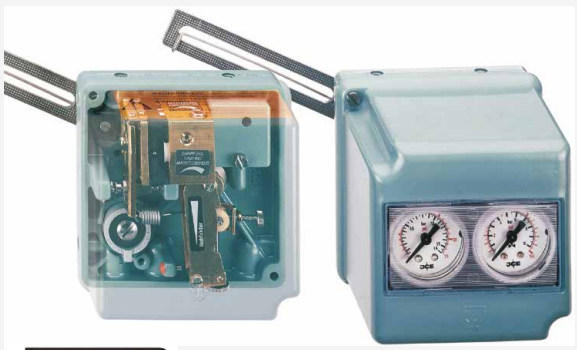
- OIL AND GAS
- CHEMICAL
- PETROCHEMICAL
- LNG-CRYOGÉNIE

Positioners

Brands:

Logix, PMV, Eckardt

Digital positioners with communication, analogic, pneumatic or electro-pneumatic



FOXBORO ECKARDT

- OIL AND GAS
- CHEMICAL
- PETROCHEMICAL
- LNG - CRYOGENIC

Process and General Service Valves

Abrasion-proof pinch valves

Brands:

RF Valve, RF Airflex

Sizes:

DN 25 to DN 1200

Style and Type:

Patented two fold «no stretch» design, for all slurry, corrosive and abrasive applications, liquids with solids, powders, for chemical, mining, water industry, manual handwheel, pneumatic, hydraulic, electric actuator, or air operated (Airflex)

Pressure Range:

PN6 to PN64 (according to size)

Temperature Range:

20°C to 100 °C

- CHEMICAL
- PETROCHEMICAL
- WATER, DESALINATION, WASTE WATER

See questionnaire on page 18 for faster ackowledgement of your request.

General Service Valves

Knife gate valve, air release

Brands:

RF SKG, RF INSAMCOR

Sizes:

2" to 48", DN 15 to DN 1600

Style and Type:

With rubber sleeves, rubber lined body, metallic, without dead zone, bi-directional tightness, manual handwheel, pneumatic, electric

Pressure Range:

10 bars

Temperature Range:

10 °C to 180 °C

- CHEMICAL
- PETROCHEMICAL
- WATER, DESALINATION, WASTE WATER

High pressure Steam Traps and Steam Boiler Equipments

GESTRA

Steam Traps : bi-metallic, diaphragm, or float type, for LP, MP & HP up to PN 630 bars.

Control Valves HP with radial cage trim, ZK model, DN 25 to 300, up to 600 °C and delta P max 560 bars.

Intermittent and Continuous boiler blow down valves, DN 15 to 50, PN 40-320.

Steam Traps Diagnostics with VKP 41, to monitor steam loss make substantial energy savings and more planet friendly.

Boiler controls with SpectorConnect to control boiler level, temperature, conductivity.

Non-return valves with disc and spring up to DN 200, PN 250, or dual plates up to PN 160.

Heat recovery skids

OIL AND GAS

CHEMICAL

PETROCHEMICAL

See enclosed questionnaire for your steam traps requests p19 (others upon request)

Special Valves

API 6A choke valves

Brands:

In Line Valve

Sizes:

3" to 10"

Style and Type:

API 6A gate valve, choke valve with plug and seat, external cage or standard cage trim, manual handwheel operator with micrometer indicator, electro-hydraulic, electric, pneumatic.

Pressure Class Range:

API 5000, API 10000

Temperature Range:

-46°C to 450 °C

OIL AND GAS

Spare Parts
for aged and new model valves

Brands:

Mapegaz, Honeywell, Eckardt, APC, Sereg, Bailey-Sereg, Sereg-Schlumberger, ADAR

For a quick search, please send us the serial number, a photo of the identification plate, an old technical sheet and process data (fluid type, upstream and downstream pressure, temperature, flow, current problem on the valve)

OIL AND GAS

CHEMICAL

PETROCHEMICAL

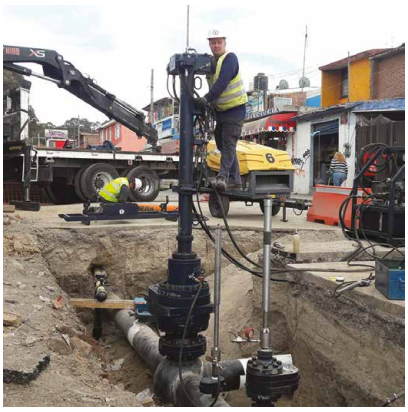
Valve Maintenance and Test Equipments, Mobile Workshop

METRUS
Valve Test Bench Excellence

unigrind

- OIL AND GAS
- CHEMICAL
- PETROCHEMICAL
- LNG - CRYOGENIC

TECPESA



Other Equipements and Services, Hot Tapping, Storage Tank farms

- OIL AND GAS
- CHEMICAL
- PETROCHEMICAL

Liquid / solid / gas separator

According to the configuration of the vessel, oil/gas separators can be divided into two families:

- Vertical Separator
- Horizontal Separator

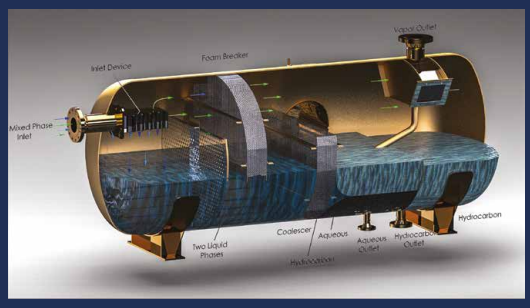
Depending on the flow media to be separated, separators are grouped into:

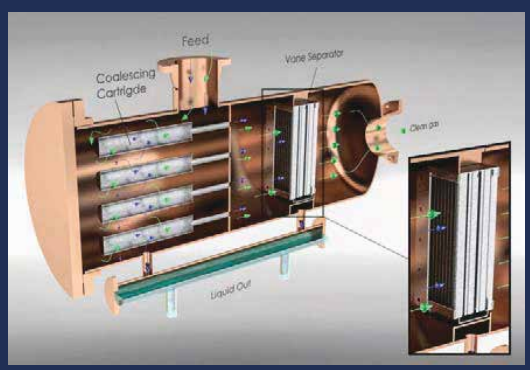
- 2- phase separator (liquid / gas)
- 3- phase separator (oil / gas / liquid)

To suit the process requirements, oil/gas separators are generally designed in multiple sections, the first section of the separator ensuring the preliminary separation of the different phases, the second and third sections permitting a complementary separation of each phase (gas, oil, and water).

Main components of the separator:

- Inlet device located in the primary separation stage for the preliminary separation of the phase;
- Squabbles downstream of the input component to improve flow distribution;
- A complementary separation device located in the primary separation section (gravity decanting) for the main separation of phases;
- An anti-foam system;
- A system for removing droplets driven with gas to reduce its subsequent content;
- Different weirs to control the liquid level or interface level.





Control Valve Datasheet

GENERAL	1	Tag number		Location															
	2	Service																	
	3	P&ID No.		Equipment															
	4	Line number		line/sched./rate/spec															
	5	Area Classification						ZONE 2, IIB, T4 (Area Classification, ATEX Eexd II B T4)												
	6	Ambient Temperature:			Min.	Max.		0 °C								50 °C			
	7	Available Pneum. Supply Pressure:			Min.	Max.		5 Barg								7 Barg.			
	8	Manufacturer		Model															
	9	Weight (kg)		Serial Number															
PROCESS CONDITIONS	10	Process Fluid		Phase				Oil or water or gas (to be conf.)											
	11	DP@ Shut Off						Barg											
	12	Design Pressure		Design Temperature				Barg								°C			
	13	Cases						Units	@ Min. Flow			@ Norm. Flow				@ Max. Flow			
	14	Flow Rate						Kg/h / mmscfd											
	15	Inlet Pressure						Bara											
	16	Pressure Drop						Bar											
	17	Inlet Temperature						°C											
	18	Specific Heat Ratio (K)						--											
	19	Molecular Weight																	
	20	Density (at inlet conditions)						Kg/m^3											
	21	Compressibility (Z)						--											
	22	Viscosity						cP											
	23	Critical Pressure						Bara											
	24	Vapour Pressure						Bara											
	24A	System pressure loss						Bar											
	25	Specific Gravity						--											
	26	Allow. Sound Press. Level		Req. Leakage Class				dBa / --		85/ IV				85/ IV			85/ IV		
CALCULATED RESULTS	27	Flow Coefficient Cv						--											
	28	Travel						%											
	29	Sound Pressure Level						dBa											
BODY AND TRIM	30	Body Size	Body Type				POSITIONER	57	Manufacturer										
	31	Body Mat.	Stem Mat.					58	Model										
	32	Rated Cv	Rated Trvl.					59	Signal: Inlet		Outlet		4-20mA/HART						
	33	Characteristics						60	Bypass		Gauges		NO		YES				
	34	Flow Action to		open/close				61	El. Conn		Conn.		1/2"NPT	1/2"NPT					
	35	Size Inlet / Outlet (inch)						62	Electrical certification										
	36	Rating Inlet / Outlet (lbs)						63	Supply				24 V loop powered						
	37	End prep. Inlet/Outlet		RFSF	RFSF		SOLENOID VALVE	64	Tag. No.										
	38	Bonnet type	Material	STND				65	Type		Size (mm)								
	39	Bolting Material	ASTM A193-B8/A194-8					66	Manufacturer										
	40	Lubricator	Isolat. Valve	NA	NA			67	Model										
	41	Guiding	No. of Ports					68	When De-Energ.Valve to				Open						
	42	Trim type	Trim size					69	Power Suppl.		El.certific.								
	43	Trim Material					Pilot Device	70	Type 3 way		voltage								
	44	Seat Mat.					LIMIT SWITCHES	71	Tag Open		Tag Close		x						
	45	Packing Mat.						72	Type										
	46	NACE Requirements		YES				73	Manufacturer										
	47	Hydrogen Service		NO				74	Model										
ACTUATOR	48	Type						75	Electrical certification										
	49	Area (mm^2)						76											
	50	Fail Position		OPEN/CLOSE			AIR SET	77	Manufacturer										
	51	Handweel		NA				78	Model										
	52	Spring range						79	Set Pressure										
	53	Mounting Orientation						80	Filter		Gauge		YES		YES				
	54	Manufacturer						81	Regulator										
	55	Model					TESTS	82	Hydro. Pressure				to ASME B16.34						
	56	Modulating						83	Leakage				class IV to ANSI/FCI-70.2						

Notes:
1) With H2S corrosive compounds
2)
3)
4)
5)
6)
7)
8)
9)
10)

Rev.	Date	By	Chk.	Appr.	Description	INSTRUMENT SPECIFICATION		
4						Control Valve		
3								
2								
1								
						Dwg.No:	Sht.: of	Rev.: 4

Shutdown Valve Datasheet

Semphil IEE Belgium

DATA SHEET

Client Name:	
Client Ref.:	
Project Name:	

Quotation No:	Q0802016	**Item:**		**Qty:**		**Date:**		**Rev.:**	21-04-09

GENERAL							
ENVIRONMENTAL DATA							
1	AMBIENT TEMPERATURE	°C	MIN. :	MAX (SHELTERED)		MAX (SOLAR)	
2	RELATIVE HUMIDITY	%	MIN. AVERAGE	MAX. AVERAGE		MAX.	
3	BAROMETRIC PRESSURE	Bar a		AREA CLASSIFICATION	☐ HAZARDOUS	☐ NON HAZARDOUS	
ACTUATOR							
4	TYPE			10	SUPPLY MEDIUM	/	
5	FAIL MODE			11	SUPPLY PRESSURE RANGE	/	
6	TRAVEL TIME	/		12	SUPPLY CONNECTION	/	
7	YOKE MATERIAL	/		13	PAINTING	/	
8	CASING MATERIAL			14			
9	SPRING MATERIAL	/		15			
SOLENOID VALVE							
16	TYPE	/		21	BODY CONNECTION	/	
17	BODY MATERIAL	/		22	INSULATION DEGREE	/	
18	TRIM MATERIAL	/		23	PROTECTION DEGREE	/	
19	RING SEAT	/		24	COIL SUPPLY VOLTAGE	/	
20	MANUAL RESET	/		25	ELECTRICAL ENTRY SIZE	/	
ACTUATOR ACCESSORIES							
26	☐ PRESSURE REDUCING SET		☐ INSTRUMENT AIR FILTER /			☐ PRESSURE GAUGE /	
27	LIMIT SWITCHES	NUMBER /	TYPE	ENTRY SIZE /	EXECUTION /		
28	AIR RESERVOIR	CAPACITY /					
29	TUBING SIZE	/		31	FITTINGS TYPE		
30	TUBING MATERIAL	/		32	FITTINGS MATERIAL		
VALVE							
33	CODE			37	TEMPERATURE LIMITATION	/	
34	END CONNECTION			38	SERVICE	/	
35	RATING			39	CORROSION ALLOWANCE	/	
36	BORE			40	PAINTING	/	
41	BODY TYPE			47	TRIM TYPE	/	
42	BODY MATERIAL			48	BALL MATERIAL	/	
43	STEM MATERIAL			49	SEATS RINGS		
44	BODY SEALS			50	SEATS	RPTFE	
45	SPRINGS			51	BODY INSERT, SECONDARY		
46	BOLTS AND NUTS			52	STEM SEALS		
53	☐ FIRE SAFE (API 6FA)	☐ DOUBLE BLOCK AND BLEED		☐ ANTISTATIC DEVICE		☐ SEALANT INJECTION	
54	☐DRAIN (API 6D)	☐ VENT (API 6D)		☐ BLOW OUT PROOF STEM			
PROCESS DATA							
55	TAG	/					
56	SIZE						
57	LINE						
58	FLUID	TO BE CONFIRMED					
59	INSTALLATION	TO BE CONFIRMED					
60	OPER. PRES.	TO BE CONFIRMED					
61	OPER. TEMP.	TO BE CONFIRMED					
62	MAX. ΔP						
63	FAIL SAFE MODE	NA					
64	TRAVEL TIME	NA					
65	MANUFACT.	EUROPEAN MANUFACTURER					
66	MODEL No.	NA					
NOTES : (1) SUPPLIER SHALL COMPLETE THE DATA SHEET IN ALL PARTS							

Questionnaire for preparing offers for RF pinch valves

CUSTOMER INFORMATION:

Contact Name:	Company:
Phone:	Address:
Fax:	Address:
Email:	Distributor/Representative:

OPERATING CONDITIONS:

Description of Flow Media and Chemical Composition: _____

Description of Valve Application: _____

Flow Media Temperature: Minimum _____ Normal _____ Maximum _____ ☐ °C

Flow Media Density: _____ kg/l Solids in Flow Media: _____ w-% Viscosity: _____ cps

Flow Media pH: _____ Maximum Line Pressure: _____ bar Pressure*) against which Valve is Closed: _____ bar

***) Pressure on one side of the closed valve only – if on both sides inform pressures.**

Valve mostly: ☐ Open ☐ Closed. Pipeline Cleaning: ☐ Steam Cleaned ☐ Flushed with _____

Valve Function: ☐ On/Off ☐ Control (Please Fill in Additional Control Valve Data) Number of Cycles: _____

Pipeline: ☐ Horizontal ☐ Vertical [If Vertical, then Flow Direction is ☐ Up or ☐ Down]

Type/Brand of Existing Valve: _____

Problem with Existing Valve: _____

Additional Information: _____

VALVE INFORMATION:

Line Size: _____ Number of Valves: _____ Flange Drillings: _____

Actuator Type:

- ☐ aiRFlex [Available Plant Air Supply Pressure Min.: _____ Max.: _____ bar]
- ☐ Manual [Chain Wheel Operated: ☐]
- ☐ Pneumatic [Minimum Available Plant Air Supply Pressure: _____ bar]
- ☐ Hydraulic [Minimum Available Supply Pressure: _____ bar]
- ☐ Electric [Supply Current: _____Volt; _____ Hz; _____ Phase]

Accessories:

Fail Position: ☐ Fail Open [Default of Pneumatic RF Valve and aiRFlex] ☐ Fail in Position ☐ Fail Close

Limit Switches: ☐ Valve Open ☐ Valve Closed ☐ Both ☐ Handwheel Lockout

Opening Tags: ☐ Elastomer Tube Wear System: ☐ Manual ☐ Automatic

Solenoid Valve for Actuator [Default is energized to close = fail open]: ☐ 220VAC ☐ 24VDC ☐ Manual Air Valve

Other: _____

CONTROL VALVE DATA

Flow Rate in m3/hr: Minimum: _____ Normal: _____ Maximum: _____

Maximum Pressure Drop Across Valve (Δp): _____ bar Required Kv: _____ Viscosity: _____

Positioner Input Signal: ☐ 0,2-1,0 bar ☐ 4-20 mA ☐ Digital Increasing Signal: ☐ Opens ☐ Closes Valve

E-mail: sales@semphil.be · Fax: +32 4 253 68 41

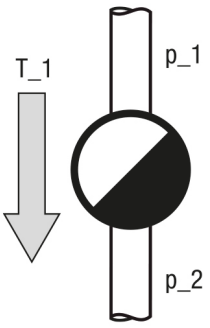
Steam pressure / p_1 _____ bar

Steam temperature / T_1 _____ °C

Backpressure / p_2 _____ bar

Product outlet temperature / T_A _____ °C
(only for draining heat exchangers)

Condensate flowrate to be discharged _____ kg/h



Fluid

❑ **Plant steam** ❑ **Pure steam** ❑ _____

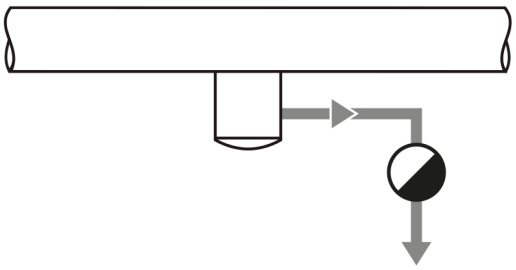
Nominal size _____ **Pressure rating** _____

End connection

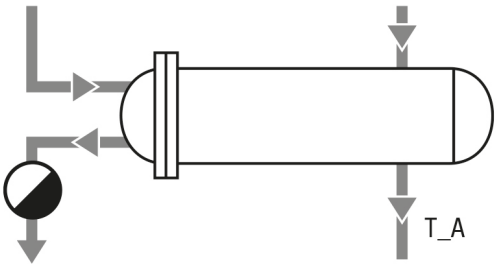
❑ **EN flanges** ❑ **ASME flanges** ❑ **Butt-weld ends** ❑ **Socket-weld ends** ❑ **Screwed sockets G** ❑ **Screwed sockets NPT**

Application

❑ **Draining pipes**



❑ **Draining a heat exchanger**



❑ _____

_____

Required inspections/approvals: _____

Your details:

Company
Name / job title
Telephone
Fax
E-mail
Date

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IEE Belgium

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Flow Control and Valve Maintenance Solutions