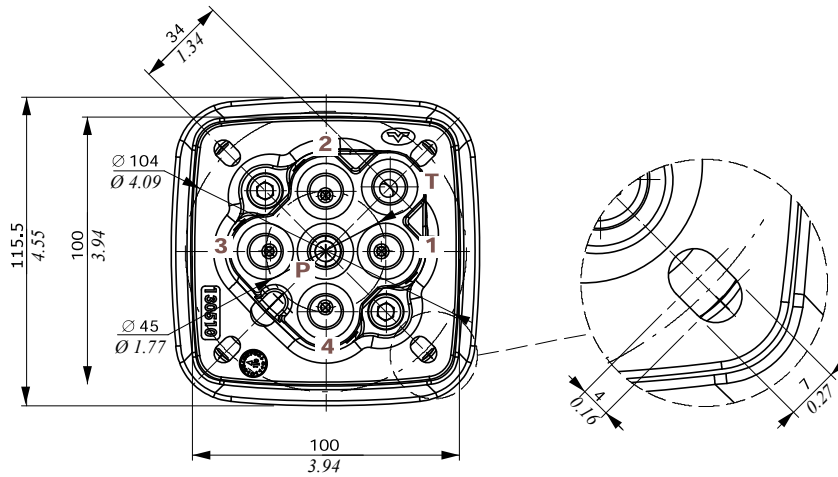
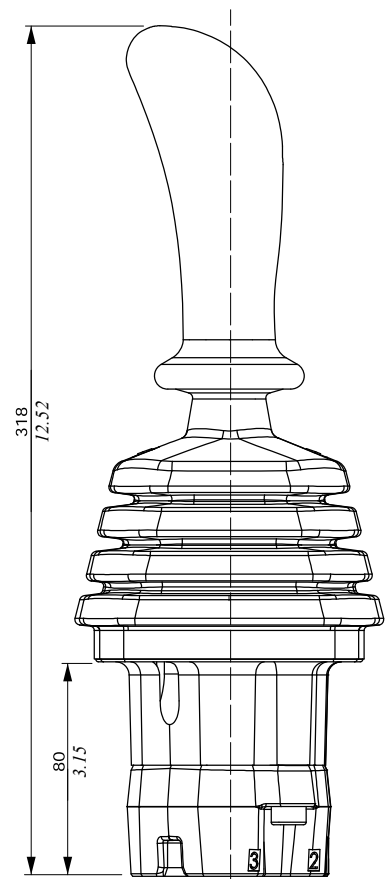
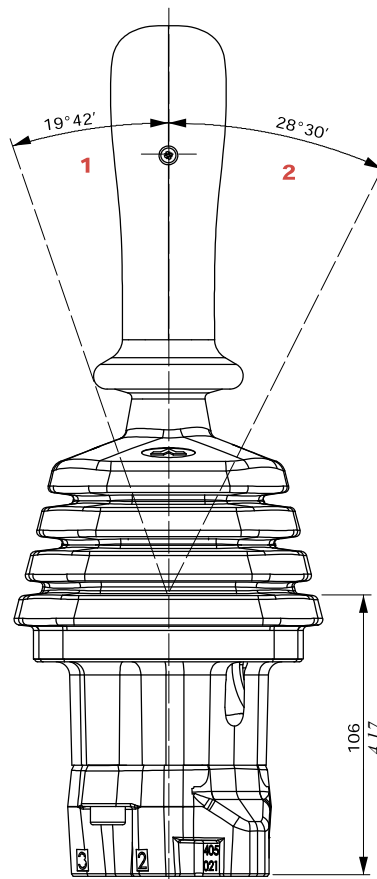


Dimensions and hydraulic circuit

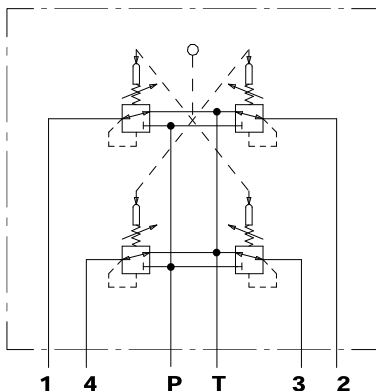
SVM400



NOTE: normally the pilot control valve is supplied with the handle oriented towards port nr. 4 (see page 20)



Hydraulic circuit

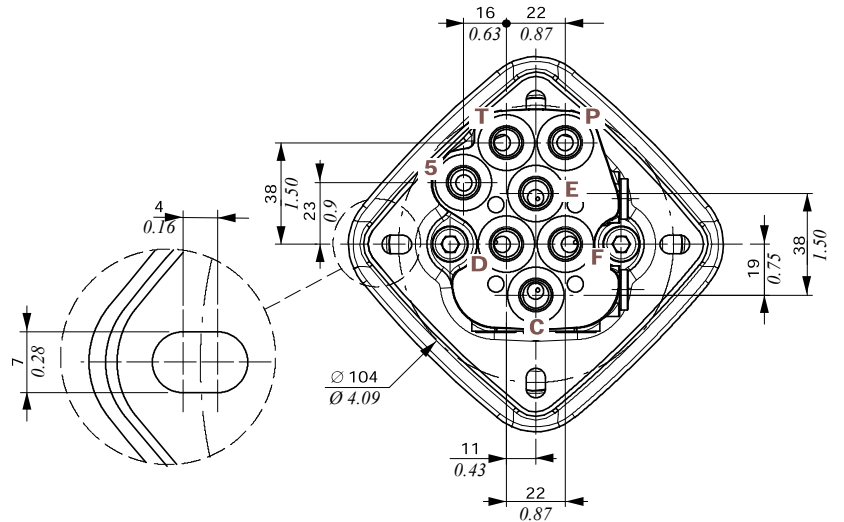


- 1 : Single work port
- 2 : Two simultaneous work ports

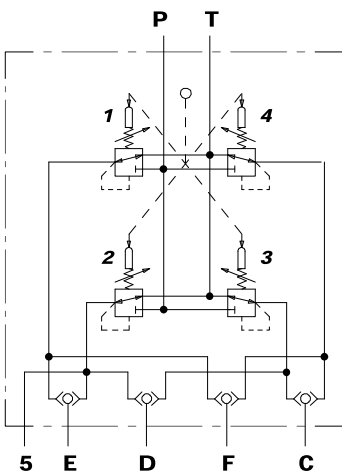
Dimensions and hydraulic circuit

SVM430

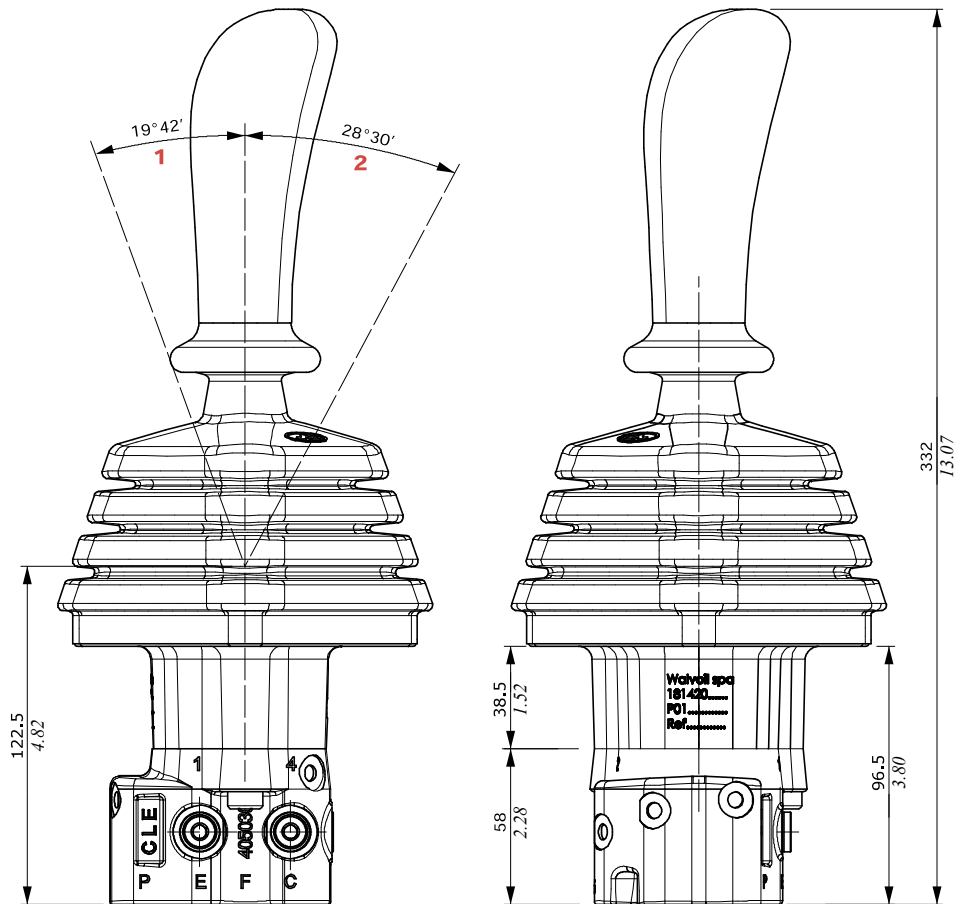
It's configured with pressure gauges (5) to get an additional output signal (ex. back-up alarm).



Hydraulic circuit



- Work port 1 ⇒ EF port ⇒ right
- Work port 2 ⇒ ED port ⇒ back
- Work port 3 ⇒ CD port ⇒ left
- Work port 4 ⇒ CF port ⇒ forward

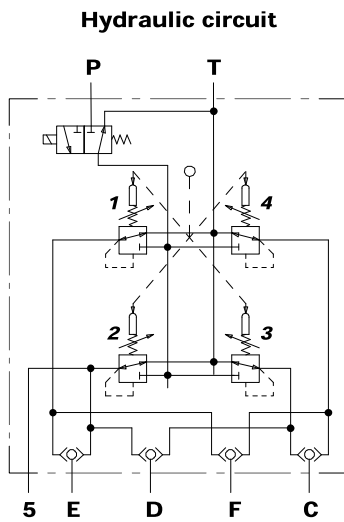
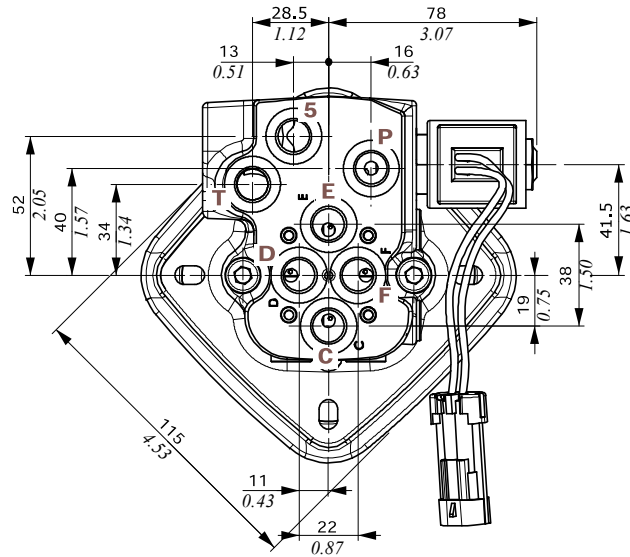


- 1 : Single work port
- 2 : Two simultaneous work ports

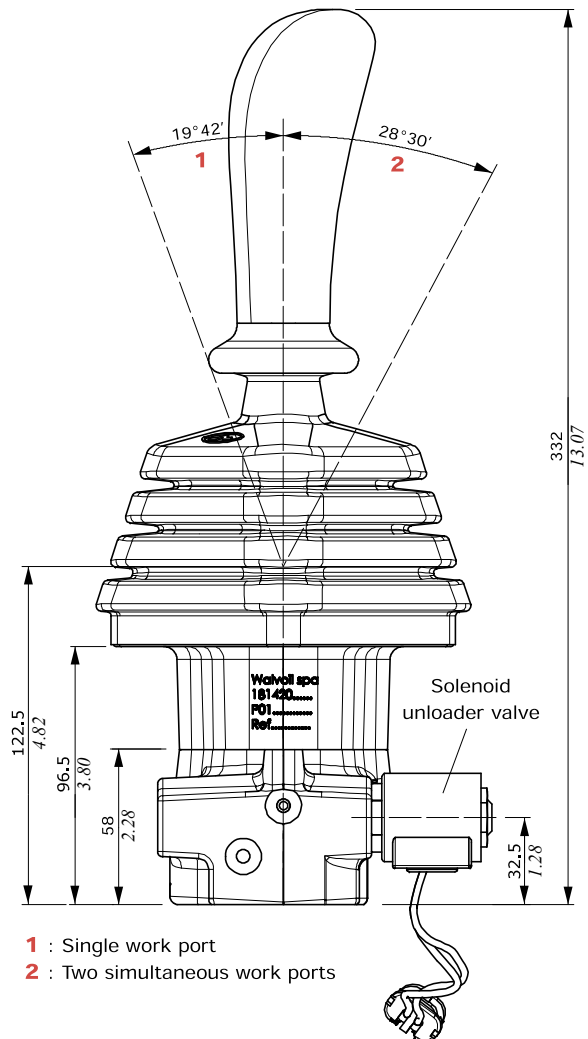
Dimensions and hydraulic circuit

SVM431

SVM431 it's configured with pressure gauges (5) to get an additional output signal with safety solenoid valve.



- Work port 1 ⇒ EF port ⇒ right
- Work port 2 ⇒ ED port ⇒ back
- Work port 3 ⇒ CD port ⇒ left
- Work port 4 ⇒ CF port ⇒ forward

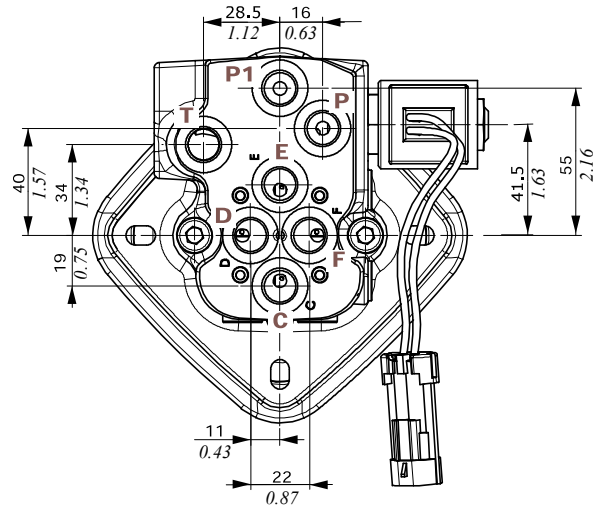


- 1 : Single work port
- 2 : Two simultaneous work ports

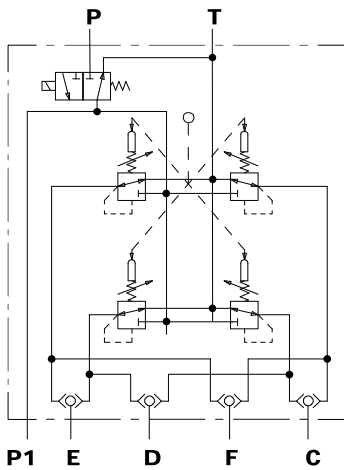
Dimensions and hydraulic circuit

SVM432

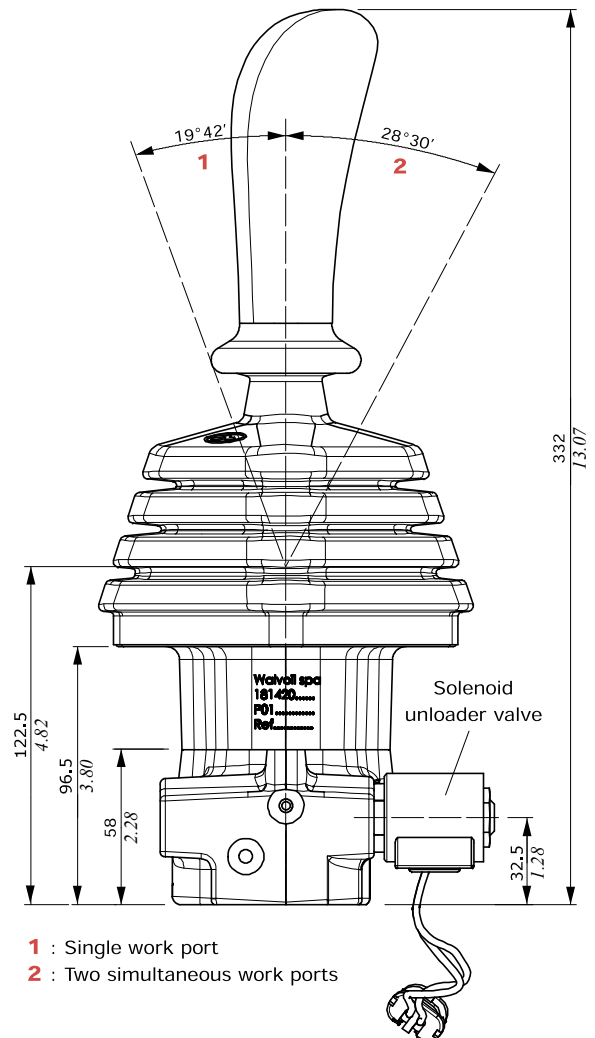
SVM432 it's configured with solenoid unloader valve and auxiliary under safety pressure gauge port (P1).



Hydraulic circuit



- Work port 1 ⇒ EF port ⇒ right
- Work port 2 ⇒ ED port ⇒ back
- Work port 3 ⇒ CD port ⇒ left
- Work port 4 ⇒ CF port ⇒ forward



- 1 : Single work port
- 2 : Two simultaneous work ports

Ordering codes

SVM400 / 0 1 - B / 01 V009 (90) - 0 0 001 A X 4 - <CRVN>

1

2

1

3

4

5

6

Body is painted as standard, with one coat of primer black antirust paint

SVM431 / 0 1 - B / 01 V009 (90) - 0 0 001 A - ELN (W1F02)-12VDC - <CRVN>

6.1

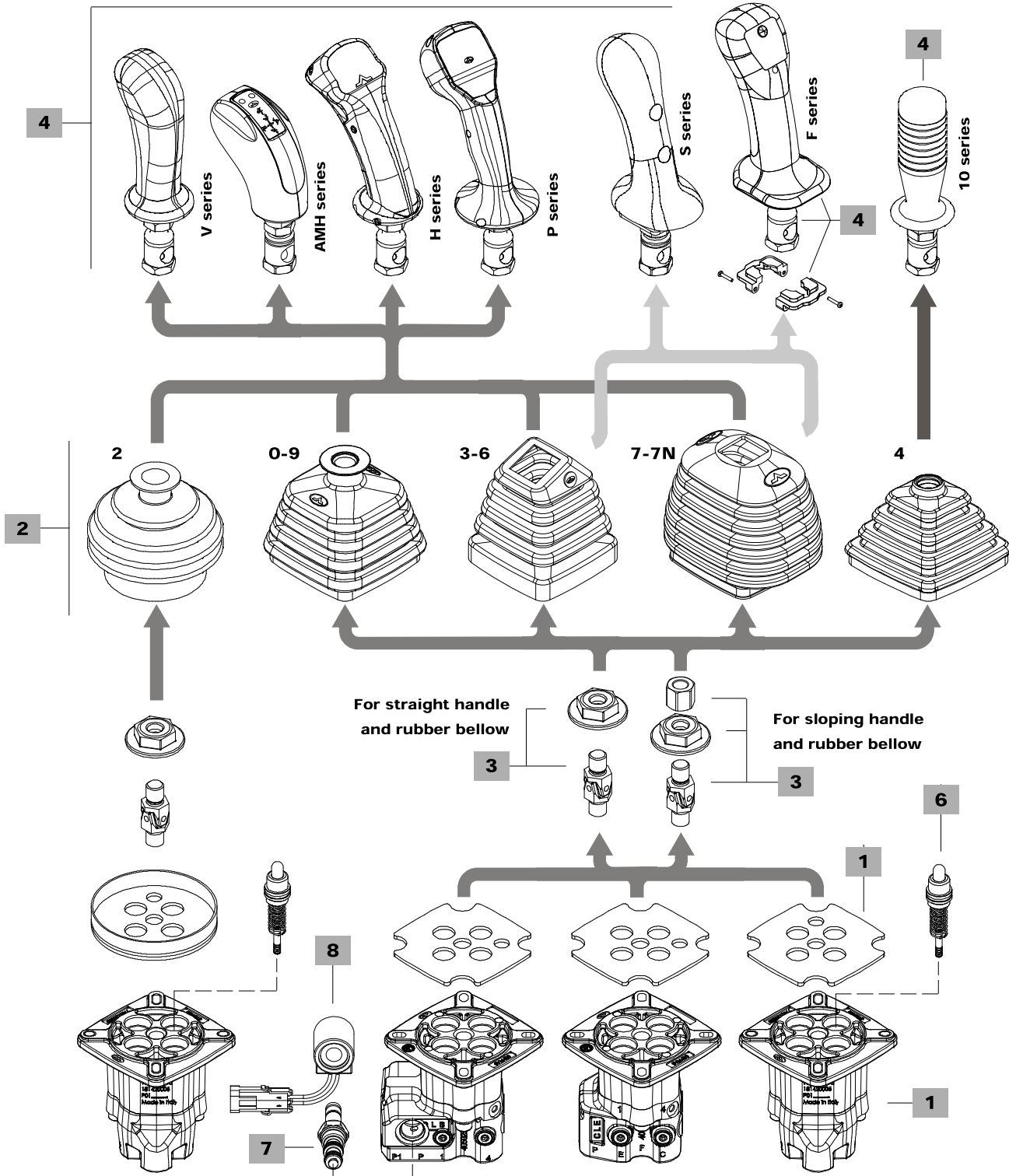
6.2

6.3

6.4

7

8



1 Body kit *

TYPE	CODE	DESCRIPTION
SVM400/1-B	5CO3422300	For rubber bellow square base
SVM400/3-B	5CO3422300C	For rubber bellow circular base
SVM430/1-B	5CO3432302	With auxiliary pressure gauge port, for rubber bellow square base
SVM431/1-B	5CO3432310	With solenoid unloader valve and aux. pressure gauge port, for square base rubber bellow
SVM432/1-B	5CO3432320	With solenoid unloader valve and auxiliary under-safety pressure gauge port, for square base rubber bellow

2 Rubber bellow

TYPE	CODE	DESCRIPTION
Circular base		
2	3SOF110100	Straight type, circular base; it can be used with sloping handles
Square/rectangular base		
0	3SOF111130	Straight type, square base with logo
3	3SOF111113	Sloping type, square base; only for 19° sloping handles. Not available for type 16 control.
6	3SOF111114	As type 3 without logo. Not available for type 16 control.
7	3SOF111135	Universal type, rectangular base. It can be used straight and 30° sloping in all directions
7N	3SOF111137	As type 7 without logo
9	3SOF111131	As type 0 without logo
4	3SOF111100	Straight type, square base

3 Control option

TYPE	CODE	DESCRIPTION
Spring return in neutral position		
01	5CIN4003	For V, H, P, S series handles and straight rubber bellow
	5CIN4001	For V, H, P, S series handles and sloping rubber bellow
01GP	5CIN4002	For 10 series handles
With microswitches for movement detection on each port.		
It needs type 7 rubber bellow and special body: please contact our Sales Department.		
16	5CIN4023	For V, H, P, S series handles and straight rubber bellow
	5CIN4021	For V, H, P, S series handles and sloping rubber bellow
16GP	5CIN4022	For 10 series handles

6 Pressure control curves

For list available see from page 25

6.1 Curve type

TYPE	DESCRIPTION
0	Standard

6.2 Typology of curves

TYPE	DESCRIPTION
0	With step
1	Without step
2	Piecewise with step
3	Piecewise without step

7 Solenoid unloader valve

TYPE	CODE	DESCRIPTION
ELN	2X4800100	Without emergency operation
ELT	2X4800200	With emergency operation

NOTE (*) – Codes are referred to **BSP** thread.

4 Handles

Some handles as examples are listed below: for technical specifications and full range of handles and other types of joint see the "Handles and levers" catalogue.

V series handle

TYPE: **VO07** CODE: 5IMP030070
DESCRIPTION: Without switches with sloping 19° left joint

AMH series handle

TYPE: **AMH0400A9-6R2035-7R2035-8R2035-9R2035-(E2)**
CODE: 2IM3000004 DESCRIPTION: 4 push buttons with spring return, protection diode, with straight joint

H series handle

TYPE: **HA029-ORD040-2RD040-4RD040**
CODE: 2IM4100109 DESCRIPTION: 2 push buttons with spring return, "dead man" switch, with straight joint

P series handle

TYPE: **PZTA4100D9-ORD035-3R1D035-4R1D035-5R1D035-6R1D035-WN130035** CODE: 2IM8600007
DESCRIPTION: 1 proportional roller, 4 push buttons with spring return, "dead man" switch, with straight joint

F series handle

TYPE: **F02F-02R(1=8)**
CODE: 320000017+430533039+430033299
DESCRIPTION: 2 front and 2 rear push buttons with spring return + sloping 15° joint + adapter kit

S series handle

TYPE: **SZTA8-0G4045-XG122045**
CODE: 2IM5310003
DESCRIPTION: 1 proportional roller and front push button, with sloping 19° right joint

10 series handle

TYPE: **X9C/C** CODE: 5IMP200040
DESCRIPTION: Upper push button, with straight joint

6.3 Curve identification

Progressive number, see tables from page 25

6.4 Return springs

TYPE	DESCRIPTION
M	Operation range from 18 to 25.5 N - <i>from 4.04 to 5.73 lbf</i>
A	Operation range from 23 to 35.2 N - <i>from 5.17 to 7.91 lbf</i>
B	Operation range from 23 to 68.1 N - <i>from 5.17 to 15.31 lbf</i>
C	Operation range from 89 to 176 N - <i>from 20 to 39.56 lbf</i>
D	Operation range from 110 to 220 N - <i>from 24.73 to 49.46 lbf</i>
E	Operation range from 138 to 276 N - <i>from 31 to 62.04 lbf</i>

8 Coil

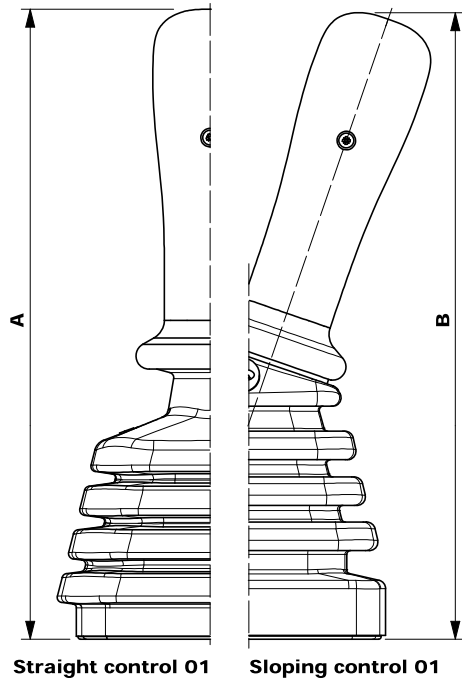
TYPE	CODE	DESCRIPTION
(D1F02)-12VDC	4SL6001200	12VDC, integrated Deutsch connector
(D1F02)-24VDC	4SL6002400	As previous 24VDC
(W1F02)-12VDC	4SL6001204	12VDC, WP Packard connector with flying leads (L = 210 mm - 8.27 in)

Configuration option

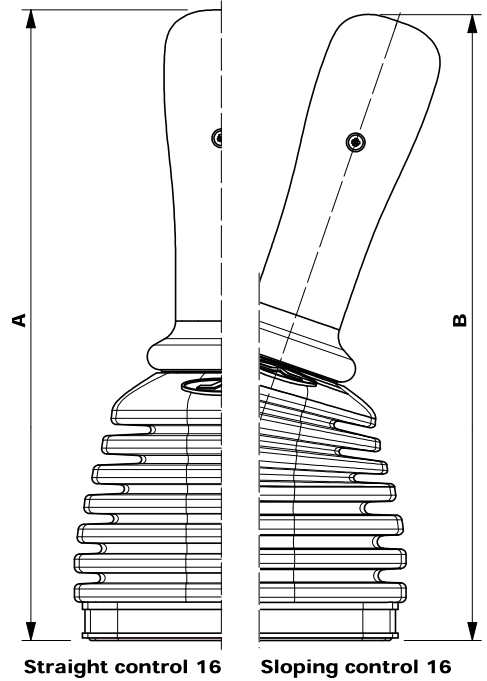
Control and handle options

Tipo 01: Spring return in neutral position.

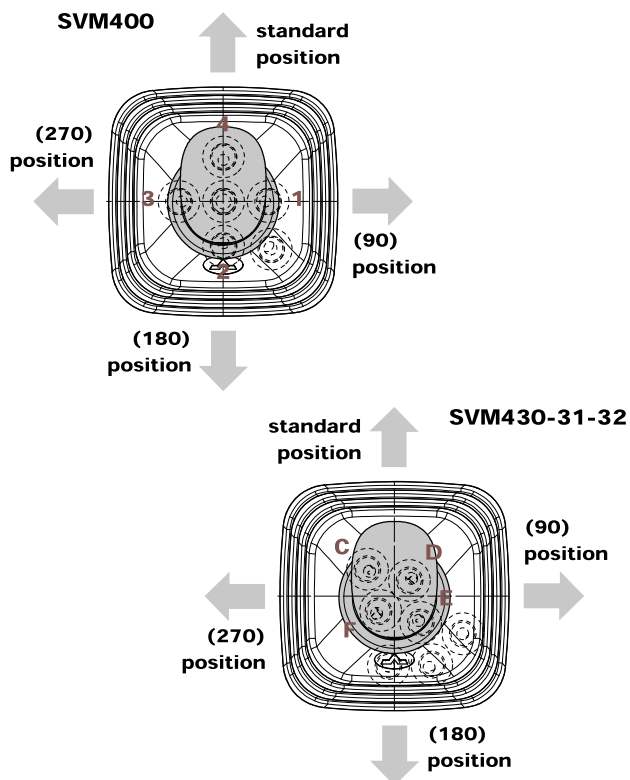
Tipo 16: With microswitches for movement detection on each port. It needs type 7 rubber bellow and special body: please contact our Sales Department.



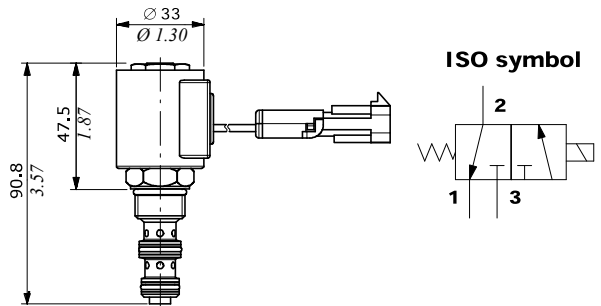
Type	A		B	
	mm	in	mm	in
V series	238	9.71	236	9.29
H series	236	9.29	234	9.21
P series	255	10.04	253	9.96
S series	251	9.88	248	9.76
10 series	222	8.74	/	/



Handles positions



Solenoid unloader valve



Features

SOLENOID VALVE

- Nominal pressure : 207 bar - 14.27 psi
- maximum internal leakage
on port 3 (de-energized coil) : 82 cm³/min a 207 bar
5 in³/min at 14.27 psi
- on port 1 (energized coil) : 164 cm³/min a 207 bar
10 in³/min at 14.27 psi

COIL

- Nominal voltage tolerance : ±15%
- Power rating : 14.7 W
- Max. operating current : 1.22 A a 12 VDC
0.61 A a 24 VDC
- Coil insulation : Class H
- Weather protection (EN 60529) : IP65 *
- Insertion : 100%
- (*) with connector correctly fitted and O-ring protection

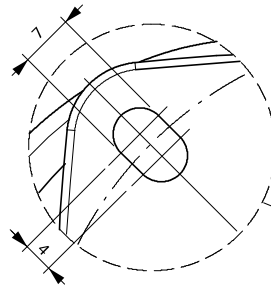
Dimensions and hydraulic circuit

Configuration with electromagnetic detent

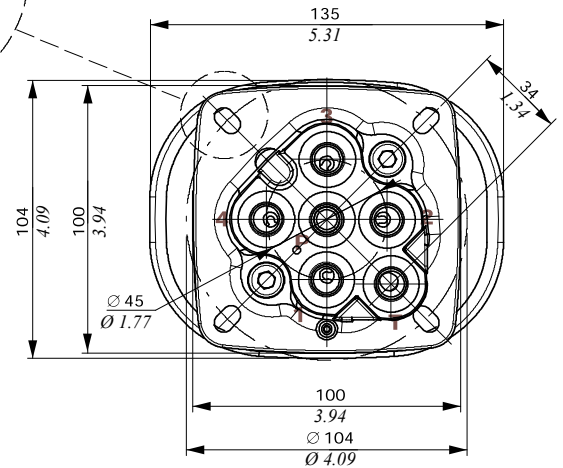
Features

ELECTROMAGNET

- Nominal voltage tolerance : ±10%
- Power rating : 8 W - 12 VDC
: 7.4 W - 24 VDC
- Nominal current : 0.66 A - 12 VDC
: 0.3 A - 24VDC
- Coil insulation : Class H
- Weather protection : IP65
- Insertion : 100%

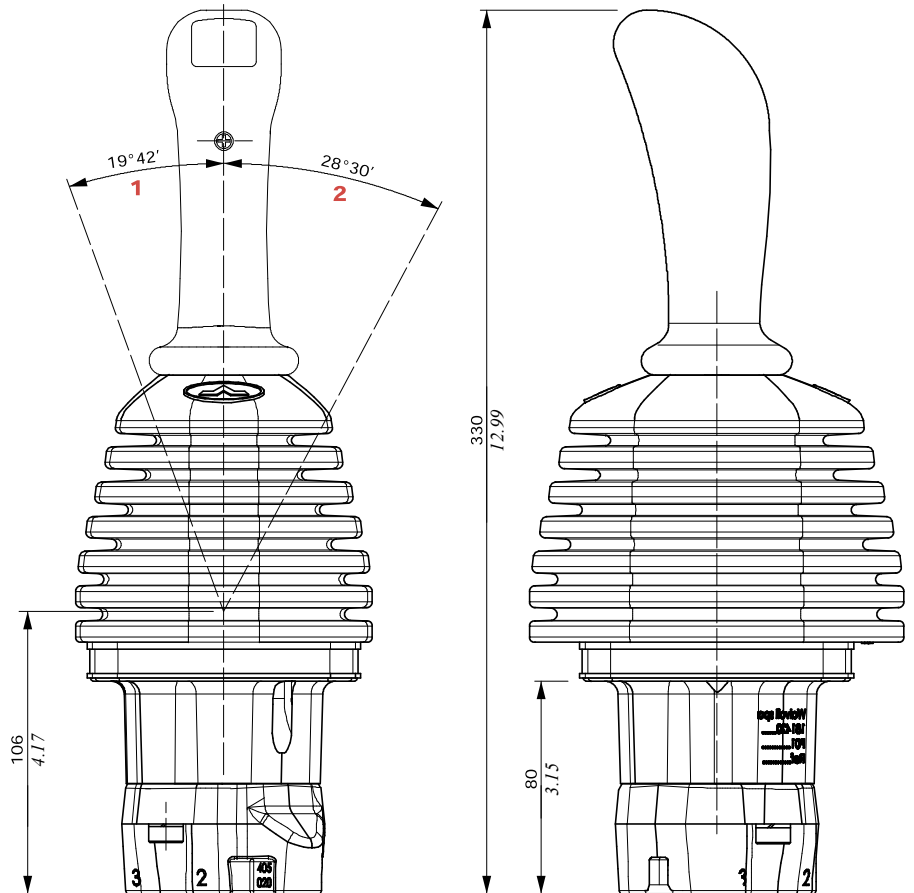
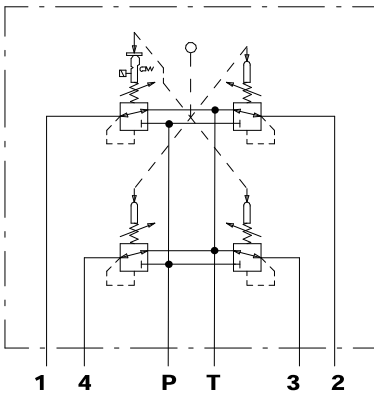


NOTE: normally the pilot control valve is supplied with the handle oriented towards port nr. 4 (see page 24)



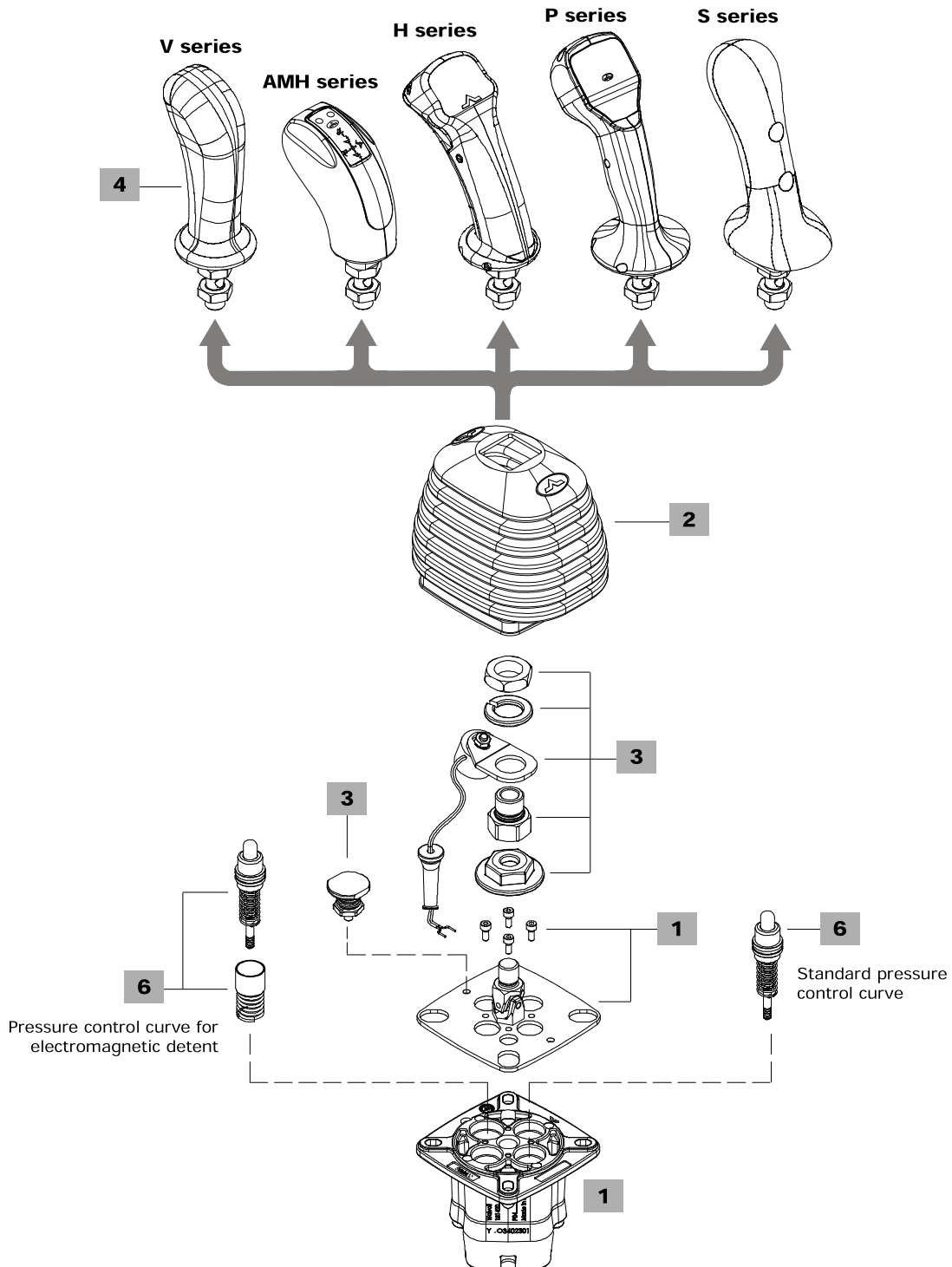
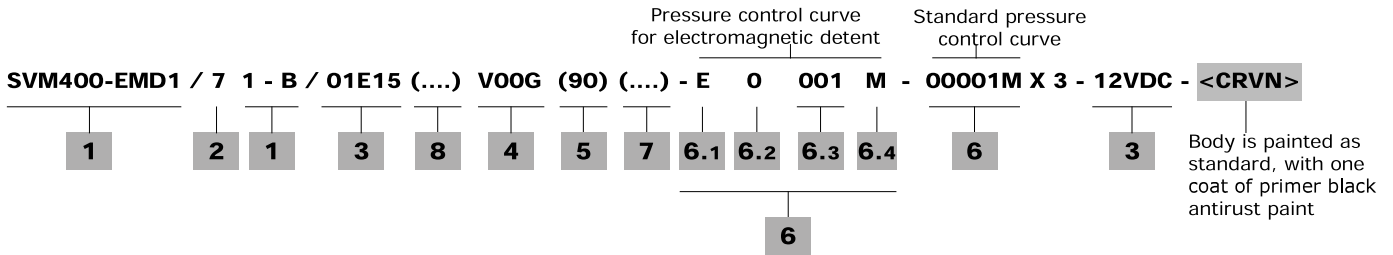
Hydraulic circuit

Example detent on working port 1



- 1 : Single work port
- 2 : Two simultaneous work ports

Ordering codes



1 Body kit *

TYPE: **SVM400-EMD0/1-B** CODE: 5C03422300
 DESCRIPTION: Without detent arrangement
 TYPE: **SVM400-EMD1/1-B** CODE: 5C03402301
 DESCRIPTION: With detent arrangement on port 1
 TYPE: **SVM400-EMD(2-4)/1-B** CODE: 5C03402306
 DESCRIPTION: With detent arrangement on ports 2 and 4

2 Rubber bellow

TYPE	CODE	DESCRIPTION
7	3SOF111135	Universal type, rectangular base. It's fitted with adapter and it can be used straight and 30° sloping in all directions
7N	3SOF111137	As type 7 without logo

3 Detent configuration

Cables are supplied with wires with tin-plate terminals

TYPE	CODE	DESCRIPTION
01E0	5CIN401E00	Spring return, without detent

Detent on port 1

01E15 5CIN401E12 12 VDC - Spring return

01E15 5CIN4E401100 24 VDC - Spring return

Detent on ports 1, 3 or 2, 4

01E25 5CIN401E22DT 12 VDC - Spring return

01E25 5CIN4E401200 24 VDC - Spring return

NOTE: For detent on different ports please contact our Sales Department.

4 Impugnature

Some handles as examples are listed below: for technical specifications and full range of handles and other types of joint see the "Handles and handlevers" catalogue.

V series handle

TYPE: **V007** CODE: 5IMPO30070

DESCRIPTION: Without switches with sloping 19° left joint **S series handle**

TYPE: **SZTA8-0G4045-XG122045**

CODE: 21M5310003

DESCRIPTION: 1 proportional roller and front push button, with sloping 19° right joint

5 Handle position

TYPE	DESCRIPTION
(-)	STANDARD configuration, operation to work port 4: omitted in description
(90)	Mounted with 90° rotation step: operation to work port 1
(180)	Mounted with 180° rotation step: operation to work port 2
(270)	Mounted with 270° rotation step: operation to work port 3

6 Pressure control curves

For list available see from page 25

6.1 Curve type

TYPE	DESCRIPTION
0	Standard
E	For electromagnetic detent, with pre-feeling

6.2 Typology of curves

TYPE	DESCRIPTION
0	With step
1	Without step
2	Piecewise with step
3	Piecewise without step

6.3 Curve identification

Progressive number, see tables from page 25

6.4 Return springs

TYPE	DESCRIPTION
M	Operation range from 18 to 25.5 N - <i>from 4.04 to 5.73 lbf</i>
A	Operation range from 23 to 35.2 N - <i>from 5.17 to 7.91 lbf</i>
B	Operation range from 23 to 68.1 N - <i>from 5.17 to 15.31 lbf</i>
C	Operation range from 89 to 176 N - <i>from 20 to 39.56 lbf</i>
D	Operation range from 110 to 220 N - <i>from 24.73 to 49.46 lbf</i>
E	Operation range from 138 to 276 N - <i>from 31 to 62.04 lbf</i>

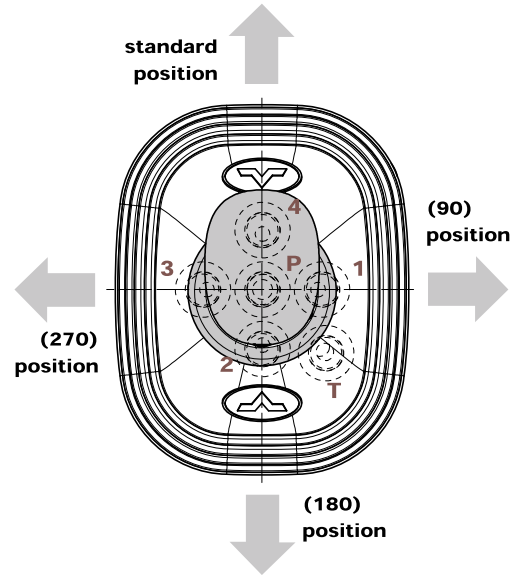
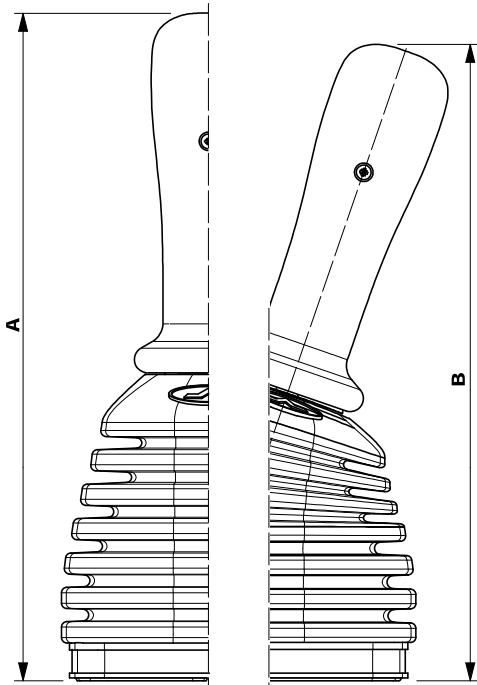
7 Connector

Configurations with detent or microswitch are provided with wires with tin-plate terminals. For connectors please contact our Sales Department

NOTE (*) – Codes are referred to **BSP** thread.

Configuration option

Handle options Handle positions



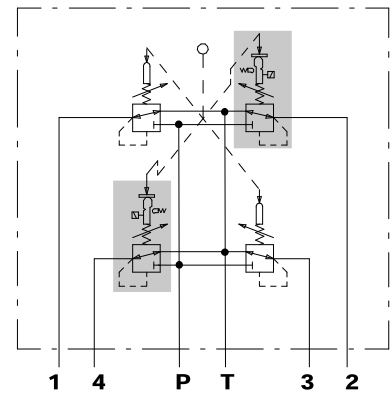
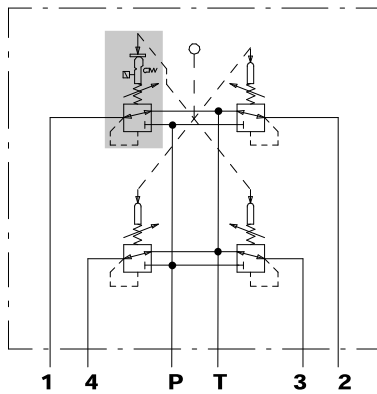
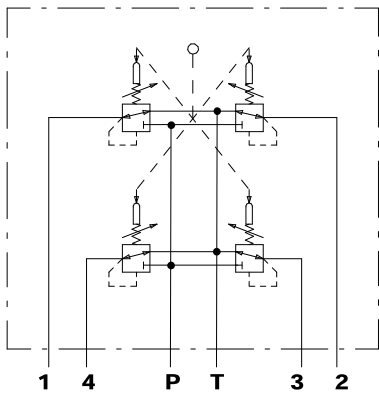
Type	A		B	
	mm	in	mm	in
V series	252	9.92	240	9.45
H series	250	9.84	240	9.45
P series	268	10.55	266	10.47
S series	266	10.47	261	10.27

Detent configuration

01E0 type
Spring return, without detent

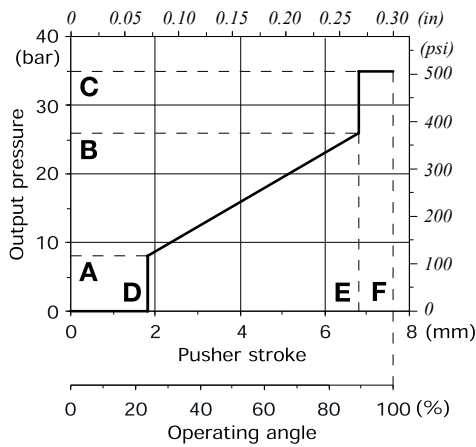
01E15 type
Single detent on port 1
(detent on ports 2-3-4 on request),
spring return

01E25 type
Detent on ports 2 and 4, spring return

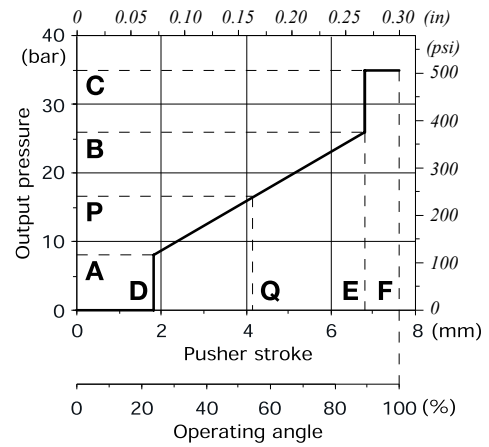


Control curves with step

00 type without pre-feeding



E0 type with pre-feeding for EM detent



Curve description		Pressure						Stroke								CODE ⁽¹⁾		
Type	Nr	A bar (±toll)	A psi (±toll)	P bar (±toll)	P psi (±toll)	B bar (±toll)	B psi (±toll)	C bar	C psi	D mm	D in	Q mm	Q in	E mm	E in		F mm	F in
Without pre-feeding																		
00	019	0,5 (+1, -0,5)	7,25 (+14,5, -7,25)			11,4 (±1)	165,3 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CR400019A
00	022	1 (±0,5)	14,5 (±7,25)			8 (±1)	116,3 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40022A
00	023	2 (±0,5)	29 (±7,25)			11,5 (±1)	166,7 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40023A
00	047	2 (+3/0)	29 (+43,5/0)			70 (±4,5)	1015 (±65,2)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40047A 5CUR40047C
00	065	2 (±0,5)	29 (±7,25)			20,5 (±1,5)	297,25 (±21,7)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40065A
00	066	2 (±0,5)	29 (±7,25)			23 (±1,5)	333,5 (±21,7)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40066B 5CUR40066C
00	110	2 (±0,5)	29 (±7,25)			15 (±1)	217,5 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CR400110A
00	043	3,2 (±0,5)	46,4 (±7,25)			11,7 (±0,5)	169,6 (±7,25)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CR400043A
00	010	3,25 (±0,5)	74,13 (±7,25)			14,8 (±1)	214,6 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40010A 5CUR40010M
00	032	3,4 (±0,5)	49,3 (±7,25)			29,4 (±1)	426,3 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40032A 5CUR40032B 5CUR40032C
00	086	4 (±1)	58 (±14,5)			16,5 (±1)	239,2 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40086A 5CUR40086C
00	073	4 (±0,5)	58 (±7,25)			18 (±1)	261 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CR400073A 5CR400073M
00	020	4,3 (±0,5)	63,3 (±7,25)			15,2 (±1)	220,4 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40020A 5CUR40020B 5CUR40020C
00	004	4,9 (±0,5)	72,5 (±7,25)			18,9 (±1)	274 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40004A 5CUR40004C 5CUR40004M
00	017	5 (±0,5)	72,5 (±7,25)			12 (±1)	174 (±14,5)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40017A 5CUR40017C
00	028	5 (±1)	72,5 (±14,5)			21 (±1,5)	304,5 (±21,7)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40028A 5CUR40028B 5CUR40028C 5CUR40028M
00	071	5 (±1)	72,5 (±14,5)			17 (±1)	246,5 (±14,5)	35	507,5	1,35	0,05			6	0,23	7,3	0,29	5CUR40071A
00	075	5 (±0,5)	72,5 (±7,25)			15 (±1,5)	217,5 (±21,7)	35	507,5	0,85	0,03			7,25	0,28	7,6	0,30	5CUR40075A 5CUR40075B 5CUR40075C 5CUR40075E 5CUR40075M
00	104	5,5 (±1)	79,75 (±14,5)			17 (±1)	246,5 (±14,5)	35	507,5	0,85	0,03			3,1	0,12	3,5	0,14	5CR400104A
00	115	5,5				28,5				0,85	0,03			5,6	0,22	6,1	0,24	5CUR40115M
00	001	5,8 (±1)	84,1 (±14,5)			22 (±2)	319 (±29)	35	507,5	1,55	0,06			7	0,27	7,5	0,29	5CUR40001A

List continues in the next page

Control curves with step

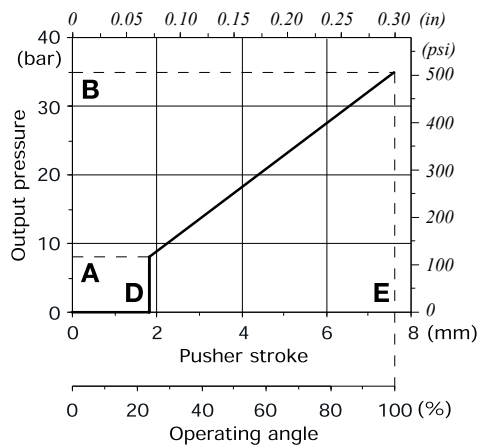
Curve description		Pressure								Stroke								CODE ⁽¹⁾
Type	Nr	A		P		B		C		D		Q		E		F		
		bar (\pm toll)	psi (\pm toll)	bar (\pm toll)	psi (\pm toll)	bar (\pm toll)	psi (\pm toll)	bar	psi	mm	in	mm	in	mm	in	mm	in	
OO	024	5.8 (\pm 1)	84.1 (\pm 14.5)			19 (\pm 1.5)	275.5 (\pm 21.7)	35	507.5	1.55	0.06			6.1	0.24	7.5	0.29	5CUR40024A 5CUR40024C
OO	033	5.8 (\pm 0.5)	84.1 (\pm 7.25)			19 (\pm 1)	275.5 (\pm 14.5)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40033A 5CUR40033B 5CUR40033C 5CUR40033M
OO	070	5.8 (\pm 1)	84.1 (\pm 14.5)			22.4 (\pm 2)	324.8 (\pm 29)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40070A 5CUR40070B 5CUR40070D 5CUR40070M
OO	087	5.8 (\pm 0.5)	84.1 (\pm 7.25)			17 (\pm 1.5)	246.5 (\pm 21.7)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40087A
OO	021	6 (\pm 0.5)	87 (\pm 7.25)			16.3 (\pm 1)	236.4 (\pm 14.5)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CR400021A 5CR400021M
OO	105	6 (\pm 0.5)	87 (\pm 7.25)			20 (\pm 1)	290 (\pm 14.5)	35	507.5	0.6	0.02			7.25	0.28	7.6	0.30	5CR400105B
OO	054	6.2 (\pm 1)	89.9 (\pm 14.5)			24.5 (\pm 2)	355.25 (\pm 29)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40054A
OO	007	6.5 (\pm 1)	94.25 (\pm 14.5)			36 (\pm 2)	522 (\pm 29)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CR400007A
OO	026	6.5 (\pm 0.5)	94.25 (\pm 7.25)			14 (\pm 1)	203 (\pm 14.5)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40026A 5CUR40026B 5CUR40026C
OO	053	8 (\pm 0.5)	116 (\pm 7.25)			22.3 (\pm 1)	323.3 (\pm 14.5)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40053A
OO	088	8 (\pm 0.5)	116 (\pm 7.25)			27 (\pm 1.5)	391.5 (\pm 21.7)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40088A 5CUR40088B 5CUR40088C 5CUR40088M
OO	089	8 (\pm 0.5)	116 (\pm 7.25)			28 (\pm 1)	406 (\pm 14.5)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40089A 5CUR40089C 5CUR40089D 5CUR40089M
OO	112	8 (\pm 1.5)	116 (\pm 21.7)			54 (\pm 3.5)	783 (\pm 50.75)	60	870	0.85	0.03			7.25	0.28	7.6	0.30	5CR400112A
OO	122	10 (\pm 1)	145 (\pm 14.5)			27 (\pm 2)	391.5 (\pm 29)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CR400122C
OO	124	10 (\pm 1)	145 (\pm 14.5)			25 (\pm 1.5)	362.5 (\pm 21.7)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CR400124A
OO	036	12 (\pm 0.5)	174 (\pm 7.25)			25 (\pm 1)	362.5 (\pm 14.5)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40036A
OO	107	12 (\pm 1)	174 (\pm 14.5)			20 (\pm 1)	290 (\pm 14.5)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CR400107A
OO	012	14 (\pm 1)	203 (\pm 14.5)			28.5 (\pm 1.5)	413.25 (\pm 21.7)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CR400012A
OO	038	22 (\pm 2)	319 (\pm 29)			37 (\pm 3)	536.5 (\pm 43.5)	35	507.5	0.85	0.03			7.25	0.28	7.6	0.30	5CUR40038C 5CUR40038M
With Pre-feeding for electromagnetic detent																		
EO	063	1.4 (\pm 0.5)	20.3 (\pm 7.25)	11.5 (\pm 1)	166.75 (\pm 14.5)	12.8 (\pm 1)	185.6 (\pm 14.5)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CUR4E063M
EO	046	2 (\pm 0.5)	29 (\pm 7.25)	13 (\pm 1)	188.5 (\pm 14.5)	14.5 (\pm 1)	210.2 (\pm 14.5)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CUR4E046M
EO	096	3.5 (\pm 0.5)	50.7 (\pm 7.25)	15 (\pm 0.5)	217.5 (\pm 7.25)	16.5 (\pm 1)	239.2 (\pm 14.5)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CR4E0096B
EO	B09	3.5 (\pm 0.5)	50.7 (\pm 7.25)	13.7 (\pm 1)	198.65 (\pm 14.5)	15.1 (\pm 1)	219 (\pm 14.5)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CUR4EB09A 5CUR4EB09M
EO	073	4 (\pm 0.5)	58 (\pm 7.25)	18 (\pm 1)	261 (\pm 14.5)	19.9 (\pm 1)	288.55 (\pm 14.5)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CR4E0073A
EO	086	4 (\pm 0.5)	58 (\pm 7.25)	16.5 (\pm 0.8)	239.3 (\pm 11.6)	18.2 (\pm 1)	263.9 (\pm 14.5)	30	435	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CUR4E086A 5CUR4E086M
EO	094	4 (\pm 0.5)	58 (\pm 7.25)	12.7 (\pm 0.5)	184.1 (\pm 7.25)	13.8 (\pm 1)	200.1 (\pm 14.5)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CUR4E094M 5CUR4E094B
EO	075	5 (\pm 0.5)	72.5 (\pm 7.25)	15 (\pm 1)	217.5 (\pm 14.5)	16.3 (\pm 1.5)	236.35 (\pm 21.7)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CUR4E075A 5CUR4E075M
EO	033	5.8 (\pm 0.5)	84.1 (\pm 7.25)	19 (\pm 1)	275.5 (\pm 14.5)	20.8 (\pm 1.5)	301.6 (\pm 21.7)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CUR4E033B 5CUR4E033M
EO	087	5.8 (\pm 0.5)	84.1 (\pm 7.25)	17.8 (\pm 1)	258.1 (\pm 14.5)	19.4 (\pm 1)	281.3 (\pm 14.5)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CUR4E087M
EO	085	6 (\pm 1)	87 (\pm 14.5)	25 (\pm 2)	362.5 (\pm 29)	27.5 (\pm 2)	398.75 (\pm 29)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CR4E0085M
EO	088	8 (\pm 0.5)	116 (\pm 7.25)	27 (\pm 1)	391.5 (\pm 14.5)	29.5 (\pm 1)	427.75 (\pm 14.5)	35	507.5	0.85	0.03	6.5	0.25	7.25	0.28	7.6	0.30	5CUR4E088M

⁽¹⁾ indicates the curve with the specific return spring

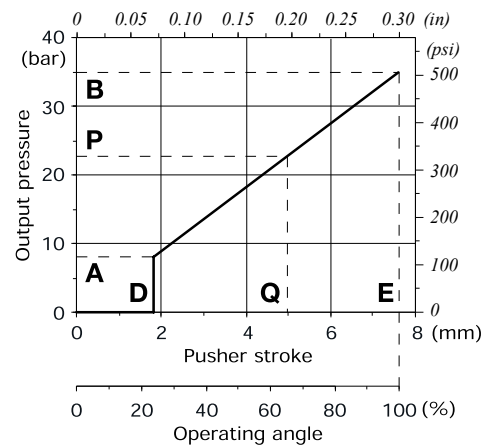
For different curves please contact our Sales Department

Control curves without step

01 type without pre-feeding



E1 type with pre-feeding for EM detent



Curve description		Pressure						Stroke						CODE ⁽¹⁾
Type	Nr	A		P		B		D		Q		E		
		bar (±toll)	psi (±toll)	bar (±toll)	psi (±toll)	bar (±toll)	psi (±toll)	mm	in	mm	in	mm	in	
Without pre-feeding														
01	148	0 (+0.5)	0 (±7.25)			13 (±1)	188.5 (±14.5)	0.85	0.03			7.6	0.30	5CUR40148B
01	151	0 (+1)	0 (±14.5)			41 (±2)	594.5 (±29)	1	0.04			5.4	0.21	5CR401151C
01	099	1 (±0.5)	14.5 (±7.25)			20 (±1.5)	290 (±21.7)	1.55	0.06			7.5	0.29	5CR401099A
01	131	1 (±1)	14.5 (±14.5)			15 (±1)	217.5 (±14.5)	0.85	0.03			7.6	0.30	5CUR40131A 5CUR40131C
01	100	1.2 (±0.5)	17.4 (±7.25)			18.9 (±1)	274 (±14.5)	0.85	0.03			7.6	0.30	5CUR40100B 5CUR40100M
01	163	1.4 (±0.5)	20.3 (±7.25)			11.5 (±1)	166.8 (±14.5)	0.85	0.03			7.6	0.30	5CUR40163A 5CUR40163M
01	105	2 (±0.5)	29 (±7.25)			8 (±1)	116 (±14.5)	0.85	0.03			7.6	0.30	5CUR40105A
01	129	2 (±0.5)	29 (±7.25)			66 (±4)	957 (±58)	0.85	0.03			6.8	0.28	5CUR40129A
01	154	2 (±0.5)	29 (±7.25)			15 (±1)	217.5 (±14.5)	0.85	0.03			7.6	0.30	5CUR40154A 5CUR40154M
01	138	2.5 (±0.5)	36.2 (±7.25)			13 (±1)	188.5 (±14.5)	0.85	0.03			7.6	0.30	5CUR40138A
01	143	3 (±0.5)	43.5 (±7.25)			25 (±1)	362.5 (±14.5)	0.85	0.03			7.6	0.30	5CUR40143A
01	127	3.4 (±0.5)	49.3 (±7.25)			12 (±1)	174 (±14.5)	0.85	0.03			7.6	0.30	5CUR40127A 5CUR40127B
01	157	3.4 (±1)	49.3 (±14.5)			17.2 (±1)	249.4 (±14.5)	0.85	0.03			7.6	0.30	5CUR40157A 5CUR40157B
01	114	4 (±0.5)	58 (±7.25)			10 (±1)	145 (±14.5)	0.85	0.03			7.6	0.30	5CUR40114A 5CUR40114B 5CUR40114M
01	126	4.5 (±0.7)	65.2 (±10.1)			30.7 (±1.5)	445.1 (±21.7)	0.85	0.03			7.6	0.30	5CUR40126A
01	170	5 (±0.5)	72.5 (±7.25)			20 (±1)	290 (±14.5)	0.85	0.03			7.6	0.30	5CUR40170A 5CUR40170M
01	175	5 (±0.5)	72.5 (±7.25)			16 (±1.5)	232 (±21.7)	0.85	0.03			7.6	0.30	5CUR40175A 5CUR40175D
01	111	5.5 (±0.5)	88 (±7.25)			25.5 (±1)	370 (±14.5)	0.85	0.03			7.6	0.30	5CUR40111A 5CUR40111B 5CUR40111C
01	118	5.8 (±1)	84.1 (±14.5)			19.5 (±1.5)	282.7 (±21.7)	1.55	0.06			7.5	0.29	5CUR40118A
01	135	5.8 (±0.5)	84.1 (±7.25)			23 (±1.5)	333.5 (±21.7)	0.85	0.03			7.6	0.30	5CUR40135A 5CUR40135M
01	167	6 (±0.5)	87 (±7.25)			18 (±1)	261 (±14.5)	0.85	0.03			7.6	0.30	5CUR40167M
01	103	6 (±1)	87 (±14.5)			30 (±2.5)	435 (±36.2)	0.85	0.03			7.6	0.30	5CUR40103A 5CUR40103M
01	106	6 (±1)	87 (±14.5)			40 (±2)	580 (±29)	0.85	0.03			7.6	0.30	5CUR40106A 5CUR40106B 5CUR40106C
01	095	6.5 (±0.5)	94.25 (±7.25)			17.8 (±1)	258.1 (±14.5)	0.85	0.03			7.6	0.30	5CR401095A
01	125	8 (±0.5)	116 (±7.25)			22.5 (±1)	326.25 (±14.5)	0.85	0.03			7.6	0.30	5CUR40125M

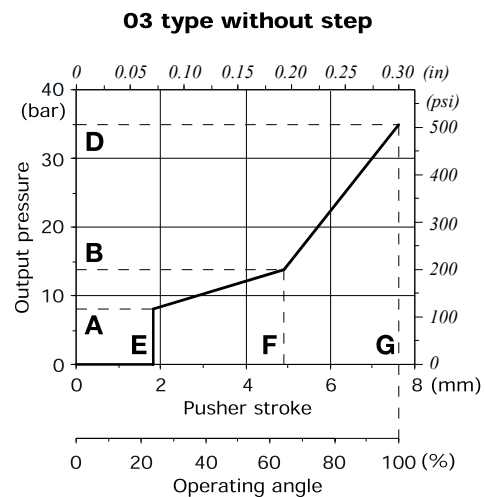
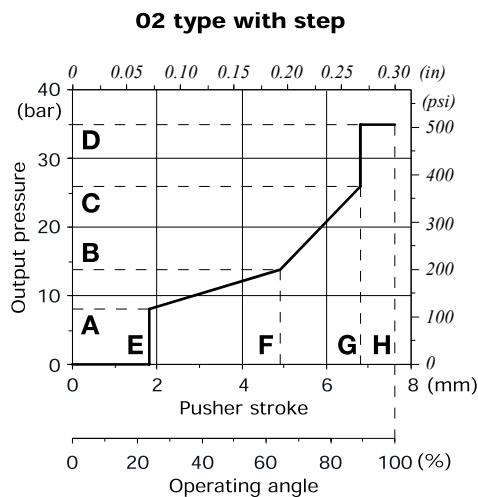
List continues in the next page

Control curves without step

Curve description		Pressure						Stroke						CODE ⁽¹⁾
Type	Nr	A		P		B		D		Q		E		
		bar (\pm toll)	psi (\pm toll)	bar (\pm toll)	psi (\pm toll)	bar (\pm toll)	psi (\pm toll)	mm	in	mm	in	mm	in	
01	115	8.3 (\pm 0.7)	120.3 (\pm 10.1)			22.5 (\pm 1)	326.2 (\pm 14.5)	0.85	0.03			7.6	0.30	5CUR40115M
01	159	10 (\pm 0.5)	145 (\pm 7.25)			28 (\pm 1)	406 (\pm 14.5)	0.85	0.03			7.6	0.30	5CUR401159A
01	090	12 (\pm 1)	174 (\pm 14.5)			18 (\pm 1)	261 (\pm 14.5)	0.85	0.03			7.6	0.30	5CR401090A
01	195	14 (\pm 1)	203 (\pm 14.5)			29.5 (\pm 1.5)	427.75 (\pm 21.7)	0.85	0.03			7.6	0.30	5CR401195A
01	144	35 (\pm 2)	507.5 (\pm 29)			70 (\pm 3.5)	1015 (\pm 50.7)	0.85	0.03			7.6	0.30	5CUR40144C
With Pre-feeling for electromagnetic detent														
E1	103	6 (\pm 1)	87 (\pm 14.5)	30 (\pm 1.5)	435 (\pm 21.7)	34.7 (\pm 2)	503.1 (\pm 29)	0.85	0.03	6.5	0.25	7.6	0.30	5CUR4E103M
E1	156	3.4 (\pm 0.5)	46.3 (\pm 7.25)	14.5 (\pm 1)	210.25 (\pm 14.5)	16.7 (\pm 1)	242.15 (\pm 14.5)	0.85	0.03	6.5	0.25	7.6	0.30	5CUR4E156M

⁽¹⁾ indicates the curve with the specific return spring
For different curves please contact our Sales Department

Control curves piecewise with and without step



Control curve with step

Curve description		Pressure						Stroke								CODE ⁽¹⁾		
Type	Nr	A		B		C		D		E		F		G			H	
		bar (\pm toll)	psi (\pm toll)	bar (\pm toll)	psi (\pm toll)	bar (\pm toll)	psi (\pm toll)	bar	psi	mm	in	mm	in	mm	in	mm	in	
02	210	1.5 (\pm 1)	21.7 (\pm 14.5)	7 (\pm 1)	101.5 (\pm 14.5)	15 (\pm 1)	217.5 (\pm 14.5)	35	507.5	0.85	0.03	5.7	0.22	7.25	0.28	7.6	0.30	5CUR40210C
02	204	4.3 (\pm 0.5)	62.3 (\pm 7.25)	12 (\pm 0.8)	174 (\pm 11.6)	20.5 (\pm 1)	297.2 (\pm 14.5)	35	507.5	0.85	0.03	5.7	0.22	7.25	0.28	7.6	0.30	5CUR40204C
02	200	7 (\pm 1)	101.5 (\pm 14.5)	13 (\pm 1)	188.5 (\pm 14.5)	22 (\pm 1)	319 (\pm 14.5)	30	435	0.85	0.03	5.7	0.22	7.25	0.28	7.6	0.30	5CUR40200A 5CUR40200M

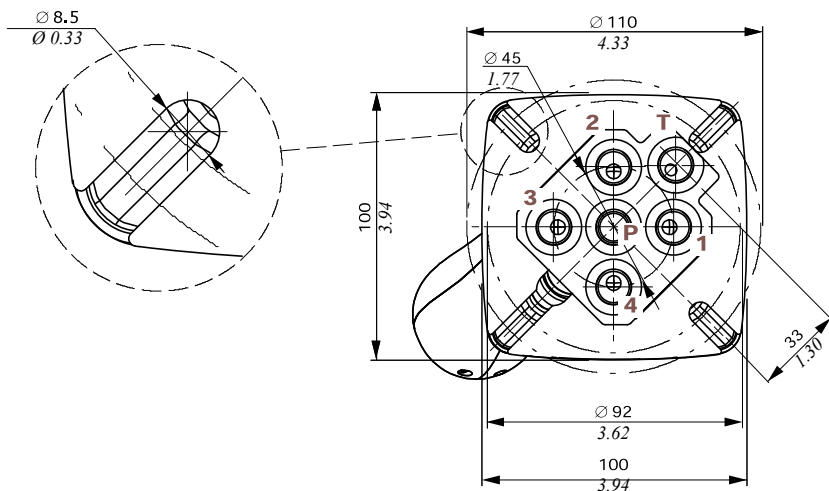
Control curve without step

Curve description		Pressure						Stroke						CODE ⁽¹⁾
Type	Nr	A		B		D		E		F		G		
		bar (\pm toll)	psi (\pm toll)	bar (\pm toll)	psi (\pm toll)	bar	psi	mm	in	mm	in	mm	in	
03	311	1.2 (\pm 0.5)	17.4 (\pm 7.25)	14.7 (\pm 2.5)	213.15 (\pm 36.25)	22 (\pm 2)	319 (\pm 29)	0.85	0.03	6.6	0.26	7.6	0.30	5CUR40311B
03	300	5.1 (\pm 0.5)	73.95 (\pm 7.25)	16 (\pm 1.5)	232 (\pm 21.75)	20 (\pm 2)	290 (\pm 29)	0.85	0.03	6.6	0.26	7.6	0.30	5CUR40300A
03	302	6 (+0.5/-1.5)	87 (+7.25/-21.75)	12 (\pm 1)	175 (\pm 14.5)	22 (+2)	320 (+29)	0.85	0.03	6.6	0.26	7.6	0.30	5CUR40302A 5CUR40302C 5CUR40302D

⁽¹⁾ indicates the curve with the specific spring
For different curves please contact our Sales Department

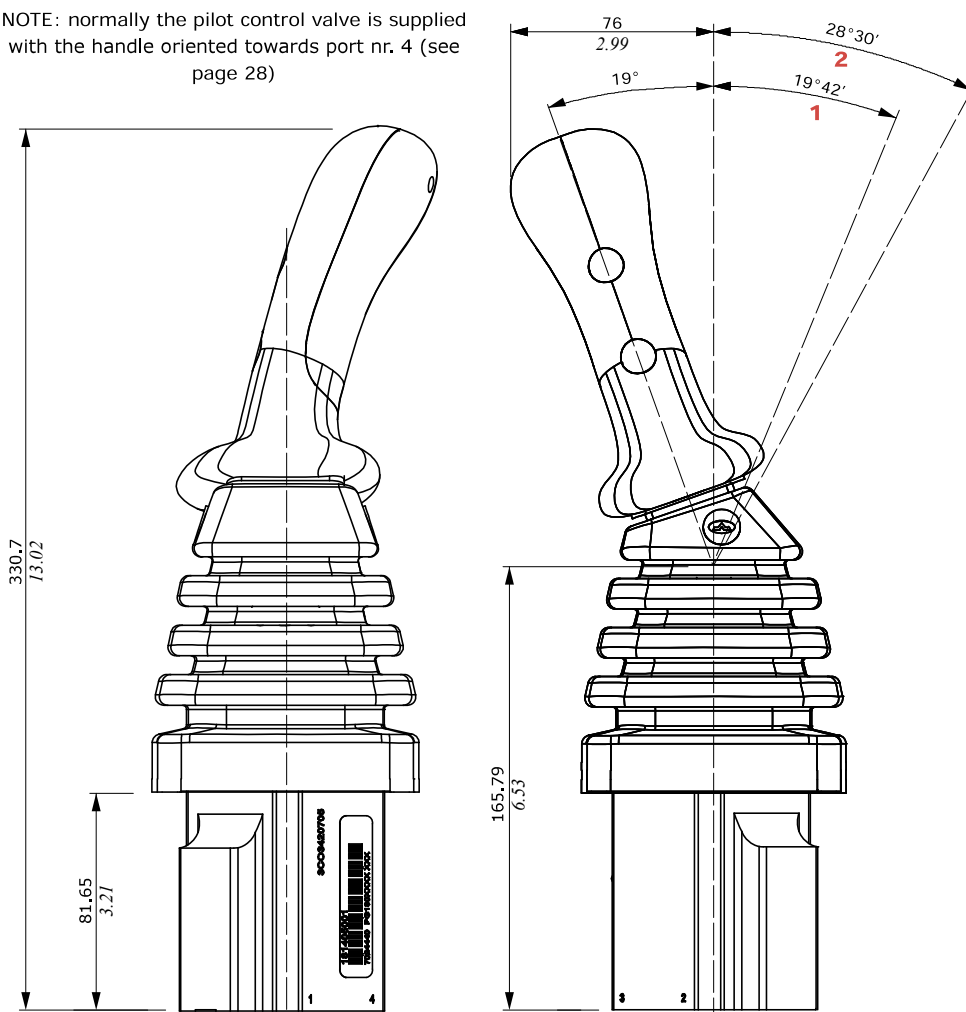
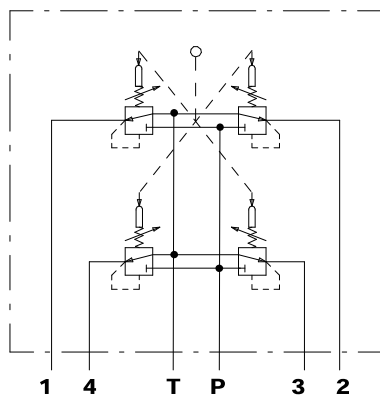
Dimensions and hydraulic circuit

Configuration with damping system.



NOTE: normally the pilot control valve is supplied with the handle oriented towards port nr. 4 (see page 28)

Hydraulic circuit



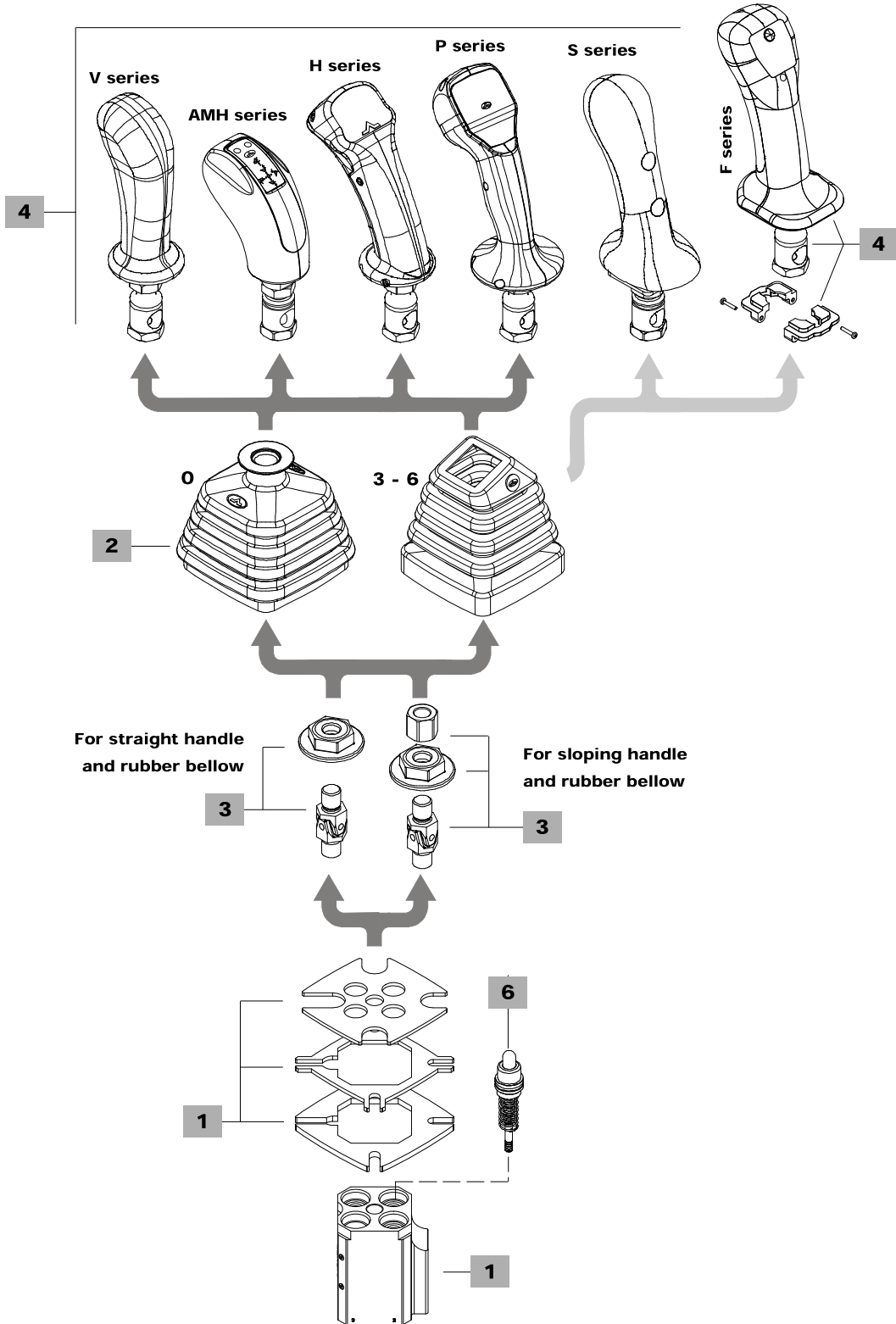
- 1 : Single work port
- 2 : Two simultaneous work ports

Ordering codes

SVM405 / 3 1 - B / 01 S108 (90) - 045(TM1M) - 0 0 089N M X 4 - <CRVN>

1
 2
 1
 3
 4
 5
 4
 6.1
 6.2
 6.3
 6.4
 6

Body is painted as standard, with one coat of primer black antirust paint



Ordering codes

1 Body kit *

TYPE	CODE	DESCRIPTION
SVM405/1-B	5CO3420305	For rubber bellow square base

2 Rubber bellow

TYPE	CODE	DESCRIPTION
For V, H, P series handles		
0	3SOF111130	Straight type, square base with logo
3	3SOF111113	Sloping type, square base; only for 19° sloping handles. Not available for type 16 control
6	3SOF111114	As type 3 without logo. Not available for type 16 control

3 Control option

TYPE	CODE	DESCRIPTION
Spring return in neutral position		
01	5CIN4003	For V, H, P, S series handles and straight rubber bellow
	5CIN4001	For V, H, P, S series handles and sloping rubber bellow
With microswitches for movement detection on each port. It needs type 7 rubber bellow and special body: please contact our Sales Department.		
16	5CIN4023	For V, H, P, S series handles and straight rubber bellow
	5CIN4021	For V, H, P, S series handles and sloping rubber bellow

4 Handles

Some handles as examples are listed below: for technical specifications and full range of handles and other types of joint see the "Handles and hand levers" catalogue.

V series handle

TYPE: **V007** CODE: 5IMP030070
DESCRIPTION: Without switches with sloping 19° left joint

AMH series handle

TYPE: **AMH0400A9-6R2035-7R2035-8R2035-9R2035-(E2)**
CODE: 2IM3000004 DESCRIPTION: 4 push buttons with spring return, protection diode, with straight joint

H series handle

TYPE: **HA029-ORD040-2RD040-4RD040**
CODE: 2IM4100109 DESCRIPTION: 2 push buttons with spring return, "dead man" switch, with straight joint

P series handle

TYPE: **PZTA4100D9-ORD035-3R1D035-4R1D035-5R1D035-6R1D035-WN130035** CODE: 2IM8600007
DESCRIPTION: 1 proportional roller, 4 push buttons with spring return, "dead man" switch, with straight joint

F series handle

TYPE: **F02F-02R(1=8)**
CODE: 320000017+430533039+430033299
DESCRIPTION: 2 front and 2 rear push buttons with spring return + sloping 15° joint + adapter kit

S series handle

TYPE: **SZTA8-0G4045-XG122045**
CODE: 2IM5310003
DESCRIPTION: 1 proportional roller and front push button, with sloping 19° right joint

5 Handle position

TYPE	DESCRIPTION
(-)	STANDARD configuration, cable operation on work port 4: omitted in description
(90)	Mounted with 90° rotation step: cable operation on work port 1
(180)	Mounted with 180° rotation step: cable operation on work port 2
(270)	Mounted with 270° rotation step: cable operation on work port 3

6 Pressure control curves

For list available see from page 33

6.1 Curve type

TYPE	DESCRIPTION
0	Standard

6.2 Typology of curves

TYPE	DESCRIPTION
0	With step
1	Without step

6.3 Curve identification

Progressive number, see tables from page 33

6.4 Return springs

TYPE	DESCRIPTION
M	Operation range from 18 to 25.5 N - <i>from 4.04 to 5.73 lbf</i>
A	Operation range from 23 to 35.2 N - <i>from 5.17 to 7.91 lbf</i>
B	Operation range from 23 to 68.1 N - <i>from 5.17 to 15.31 lbf</i>
C	Operation range from 89 to 176 N - <i>from 20 to 39.56 lbf</i>
D	Operation range from 110 to 220 N - <i>from 24.73 to 49.46 lbf</i>
E	Operation range from 138 to 276 N - <i>from 31 to 62.04 lbf</i>

NOTE (*) – Codes are referred to **BSP** thread.