

CARTRIDGE MOUNTED SINGLE-ACTING AND SHUT-OFF METRIC-UNF-CYLINDRICAL CONTROL VALVES

FT 247/2

Cartridge mounted double-acting microfine control valves

FT 264/2

Cartridge mounted double-acting control valves (cylindrical thread)

FT 267/2

Cartridge mounted double-acting control valves

FT 267/5

Cartridge mounted single-acting control valves

FT 267/6

Cartridge mounted single-acting valves

FT 287/2

Cartridge mounted pressure compensated flow control valves

FT 297/2

Cartridge mounted pressure compensated microfine flow control valves

FT 265/2 UNF

High flow rate threaded cartridge mounted double-acting control valves

FT 266/2 UNF

Cartridge mounted double-acting control valves

FT 266/5 UNF

Cartridge mounted single-acting control valves

FT 266/6 UNF

Cartridge mounted single-acting valves

FT 268/2 UNF

Two-way pressure compensated control valves- low friction

FT 243/2

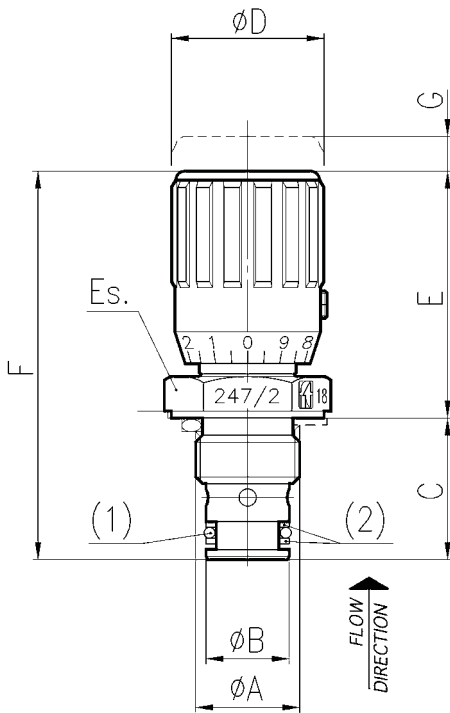
Double-acting braking valves

FT 243/5

Single-acting braking valves

FT 243/5-S

Single-acting braking valves with breather



MATERIALS

BODY	11 S MN Pb 30 - UNI EN 10087
NEEDLE	AISI 303
OR	NITRILE
ANTIEXTRUSION RING	PTFE
KNOB	GD AL Si 12 - UNI EN AB 46100

EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL
STEEL	FT 247/2	18	V
STAINLESS STEEL	FT 2247/2	18	-

SEAL KIT ON THE SEATING

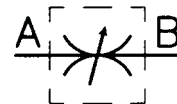
TYPE	1 (OR)	2 (BK)
18	108	NOT STANDARD

SEAL KIT ON THE NEEDLE

TYPE	OR	BK
18	2018	2018

DIMENSIONS

TYPE	ØA UNI 4534	ØB	C	ØD	E	F	G	Es.	WEIGHT KG
18	M15x1	12	20,5	22	34,5	55	8	22	0,069



THREADED CARTRIDGE MOUNTED MICROFINE CONTROL VALVES

Appreciated for their little sizes, suitable for their placing in control blocks. They have maintained the other characteristics of the series FT 257; they ensure:

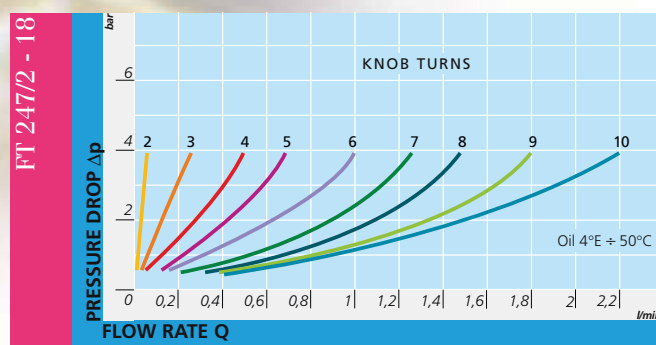
- efficient metallic sealing
- mechanical secure against accidental needle withdrawal

On request

- Complete with Viton seals (V)
- Version in AISI 316 code FT 2247/2
- Knob in ABS (mp)

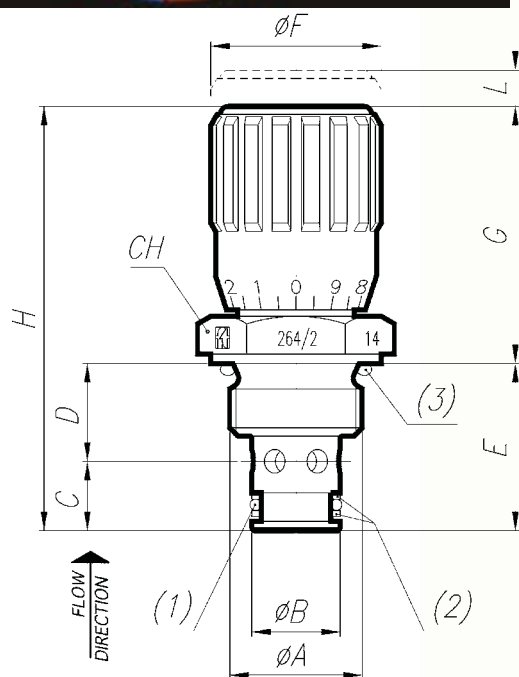


FT 247/2



TECHNICAL DATA

TIPO	MAX WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	FLOW SECTION CM ²	WORKING TEMPERATURE °C	FILTRATION GRADE μ M ABSOLUTE
18	320	1300	0,0314	-20°/+100°	25



MATERIALS

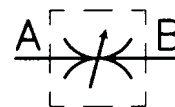
BODY	11 S MN Pb 30 - UNI EN 10087
NEEDLE	1 C 40 - UNI 8373
OR	NITRILE
ANTIEXTRUSION RING	PTFE
KNOB	GD AL SI 12 - UNI EN AB 46100
KNOB (MP)	ABS

EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL	PLASTIC KNOB
STEEL	FT 264/2	38	V	MP
STAINLESS STEEL	FT 2264/2	12	-	MP

DIMENSIONS

TYPE	ØA	ØB	C	D	E	ØF	G	H	L	CH	(3)
18	1/2" GAS	14	12,5	14	26,5	22	36,8	63,3	5,6	27	ORM 0180-25
14	1/2" GAS	14	11	15,5	26,5	27	40,8	67,3	4,9	27	ORM 0180-25
38	1/2" GAS	16	13	17,5	30,5	33	47	77,5	8,3	27	ORM 0180-25
12	3/4" GAS	19	15,5	24,5	40	38	54,6	94,6	9,9	32	ORM 0250-25
34	1" GAS	27	18	26	44	47	64,6	108,6	12	41	ORM 0300-30



THREADED CARTRIDGE MOUNTED DOUBLE-ACTING CONTROL VALVES BSP

They allow for regulation of flow in both directions.

On request

- Version AISI 316 Code FT 2264/2
- Complete with Viton seals (V)
- Knob in ABS (mp)
- Lobes aluminium die-cast handwheel (RA)



FT 264/2

TECHNICAL DATA

TIPO	TYPE FLOW SECTION CM ²	MAX. WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μM ABSOLUTE
18	0,12	320	1300	-20°/+100°	25
14	0,19	320	1300	-20°/+100°	25
38	0,39	320	1300	-20°/+100°	25
12	0,68	320	1300	-20°/+100°	25
34	1,13	320	1300	-20°/+100°	25

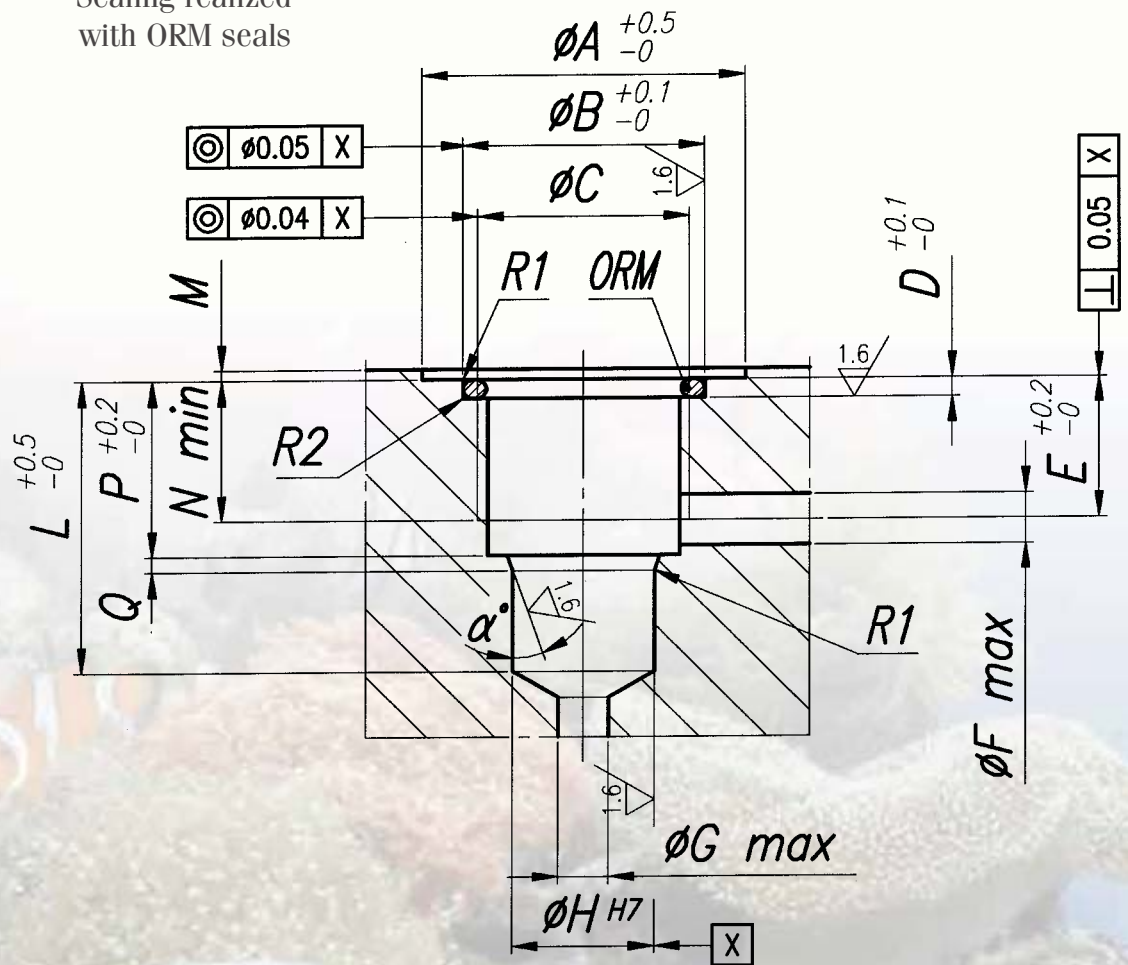
SEAL KIT ON THE NEEDLE

TYPE	OR	BK
18	2018	2018
14	2021	2021
38	108	108
12	2043	2043
34	115	115

SEAL KIT ON THE SEATING

TYPE	(1) OR	(2) BK
18	2043	BK 14 (FT)
14	2043	BK 14 (FT)
38	2050	BK 38 (FT)
12	2062	BK 12 (FT)
34	130	BK 34 (FT)

Sealing realized
with ORM seals



SEATING MACHINING DRAWINGS FOR GAS THREADED VALVES

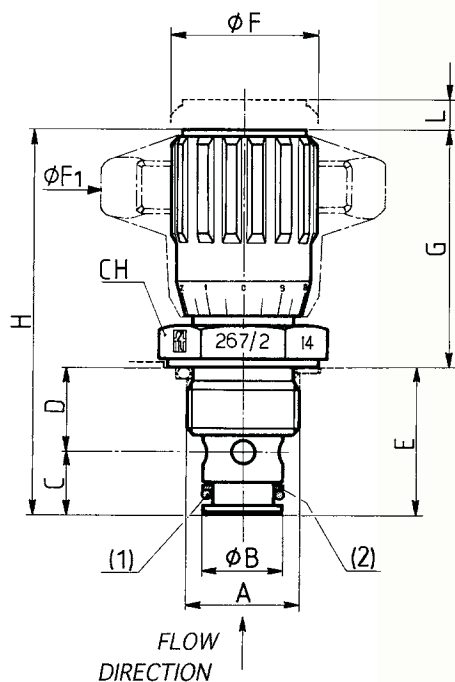


FT 264/2

TYPE	ORM	ØA	ØB	ØC	D	E	ØF	ØG	ØH	L	M	N	P	Q	R1	R2	α°
18	0180-25	32	24	1/2" GAS	1,9	14	5	5	14	29	1	14	17,5	1,5	0,1	0,75	70°
14	0180-25	32	24	1/2" GAS	1,9	14	5	5	14	29	1	14	17,5	1,5	0,1	0,75	70°
38	0180-25	32	24	1/2" GAS	1,9	16,5	8	8	16	33	1	14	20,5	1,5	0,1	0,75	70°
12	0250-25	37	30	3/4" GAS	1,9	24	10	10	19	42	1	21	29	1,5	0,1	0,75	70°
34	0300-30	47	36	1" GAS	2,4	24,5	12	12	27	46	1	21	30	1,5	0,1	0,75	70°



FT 267/2



MATERIALS

BODY	11 S MN Pb 30 - UNI EN 10087
NEEDLE	1 C 40 - UNI 8373
OR	NITRILE
ANTIEXTRUSION RING	PTFE
KNOB	GD AL SI 12 - UNI EN AB 46100
KNOB (MP)	ABS

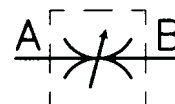
EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL	PLASTIC KNOB
STEEL	FT 267/2	38	V	MP
STAINLESS STEEL	FT 2267/2	12	-	MP



DIMENSIONS

TYPE	A	øB	C	D	E	øF	øF1	G	H	L	CH	WEIGHT KG
18	M15x1	12	9,3	11,2	20,5	22	40	35	55,5	5	22	0,064
14	M20x1,5	14	11	15,5	26,5	27	50	42,5	68,5	7	27	0,125
38	M20x1,5	16	13	17,5	30,5	33	70	48,5	78,5	9	27	0,180
12	M27x2	19	15,5	24,5	40	38	80	56	96	10,5	32	0,305
34	M33x2	27	18	26	44	47	100	63,5	109	13	41	0,580
100	M42x2	35	22	30,5	52,5	58	120	82	134,5	20	50	1,185



THREADED CARTRIDGE MOUNTED DOUBLE-ACTING CONTROL VALVES

They allow for regulation of flow in both directions.

On request

- Version AISI 316 Code FT 2267/2
- Complete with Viton seals (V)
- Knob in ABS (mp)
- Lobes aluminium die-cast handwheel (RA)



FT 267/2

TECHNICAL DATA

TIPO	TYPE FLOW SECTION CM ²	MAX. WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE µM ABSOLUTE
18	0,12	320	1300	-20°/+100°	25
14	0,19	320	1300	-20°/+100°	25
38	0,39	320	1300	-20°/+100°	25
12	0,68	320	1300	-20°/+100°	25
34	1,13	320	1300	-20°/+100°	25
100	2,09	320	1300	-20°/+100°	25

SEAL KIT ON THE NEEDLE

TYPE	OR	BK
18	2018	2018
14	2021	2021
38	108	108
12	2043	2043
34	115	115
100	123	123

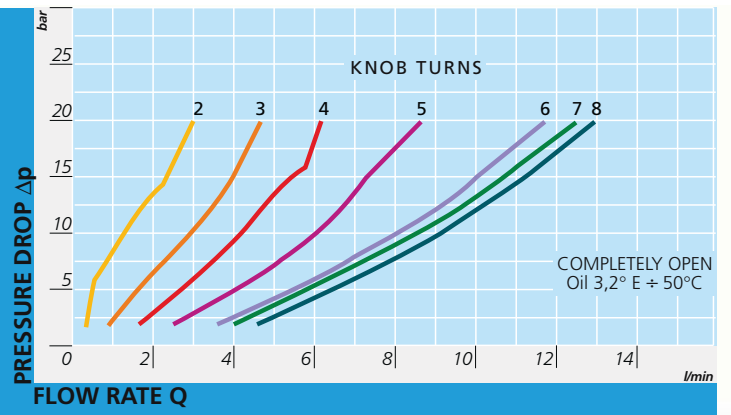
SEAL KIT ON THE SEATING

TYPE	1 (OR)	2 (BK)
18	108	267/2-022.00.1-18
14	2043	267/2-022.00.1-14
38	2050	267/2-022.00.1-38
12	2062	267/2-022.00.1-12
34	130	267/2-022.00.1-34
100	3118	267/5-022.00.1-34

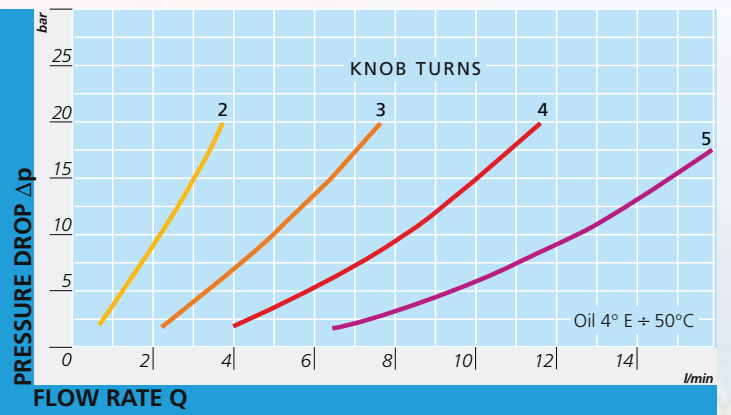


FT 267/2

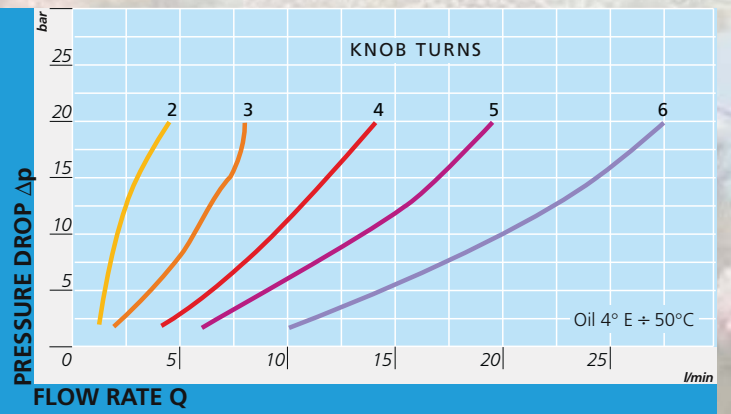
FT 267/2 - 18



FT 267/2 - 14

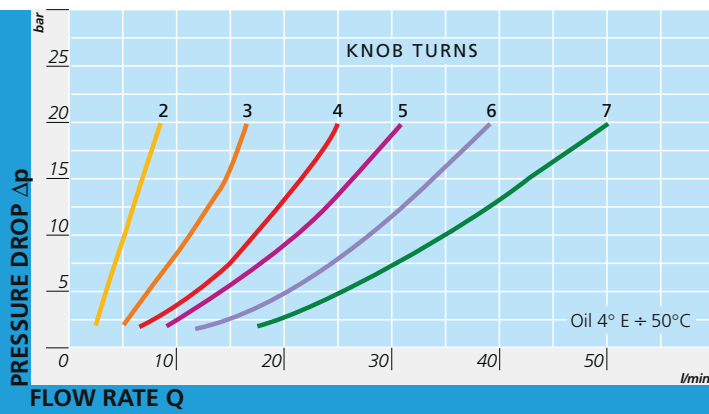


FT 267/2 - 38

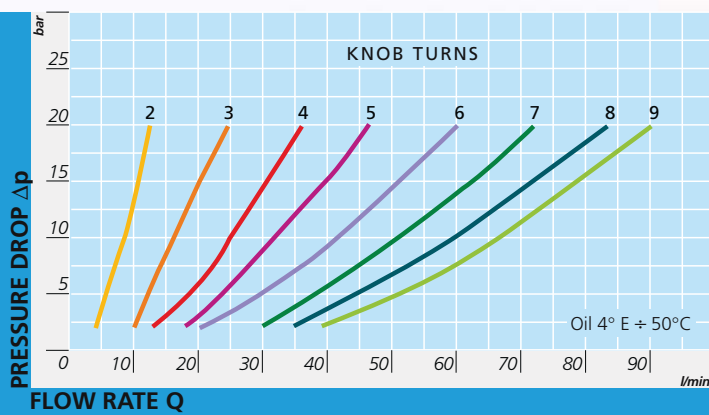


FLOW RATE CURVES

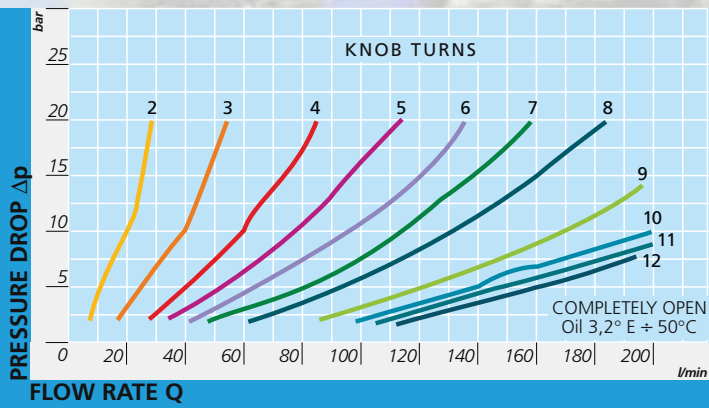
FT 267/2 - 12



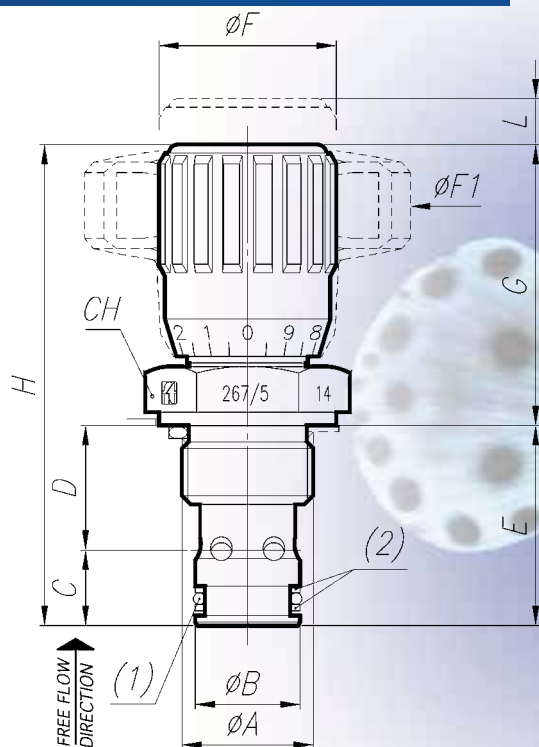
FT 267/2 - 34



FT 267/2 - 100



FT 267/2



MATERIALS

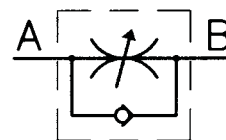
BODY	11 S MN PB 30 - UNI EN 10087
NEEDLE	38 NI CR MO4 - UNI EN 10083
OR	NITRILE
ANTIEXTRUSION RINGS	PTFE
CHECK VALVE	38 NI CR MO4 - UNI EN 10083
SPRING	C85 - UNI EN 10089
KNOB	GD AL SI 12 - UNI EN AB 46100
KNOB (MP)	ABS

EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL	PLASTIC KNOB
STEEL	FT 267/5	38	V	MP
STAINLESS STEEL	FT 2267/5	12	-	MP

DIMENSIONS

TYPE	ØA UNI 4534	ØB	C	D	E	ØF	ØF1	G	H	L	CH	WEIGHT KG
14	M20x1,5	16	11,5	19	30,5	27	50	43	73,5	4	27	0,130
38	M27x2	19	14	26	40	33	49	52,5	92,5	6	32	0,250
12	M33x2	27	17	27,5	44,5	38	60	60	104,5	7	41	0,340
34	M42x2	35	19,5	33	52,5	47	70	69,5	122	8	50	0,620
100	M52x2	45	22,5	42	64,5	58	120	85	149,5	12	60	1,632



CARTRIDGE MOUNTED SINGLE-ACTING CONTROL VALVES

They control and, in case, shut-off the flow in one direction and allow the full free flow in the opposite direction.

- Check valve calibrated at 0,35 bar

On request

- Version in AISI 316 code FT 2267/5
- Complete with Viton seals (V)
- Knob in ABS (mp)
- Lobes aluminium die-cast handwheel (RA)



FT 267/5

TECHNICAL DATA

TYPE	TYPE FLOW SECTION CM ²	MAX. WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μM ABSOLUTE
14	0,07	320	1300	-20°/+100°	25
38	0,15	320	1300	-20°/+100°	25
12	0,37	320	1300	-20°/+100°	25
34	1,56	320	1300	-20°/+100°	25
100	3,80	320	1300	-20°/+100°	25

SEAL KIT ON THE NEEDLE

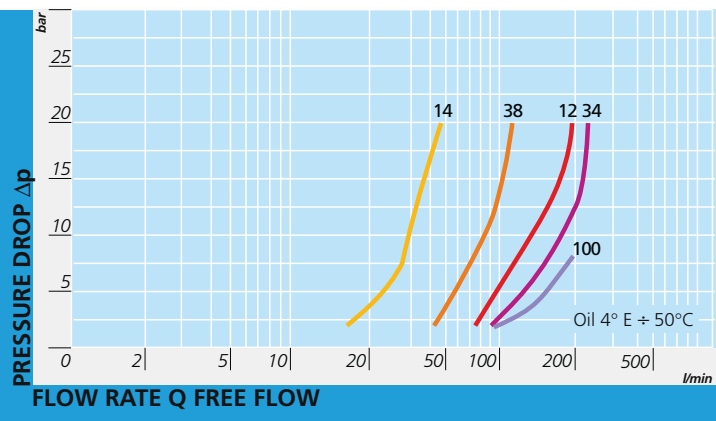
TYPE	OR	ANTIEXTRUSION RINGS
14	2021	200-801
38	2018	2018
12	106	106
34	108	108
100	112	112

SEAL KIT ON THE SEATING

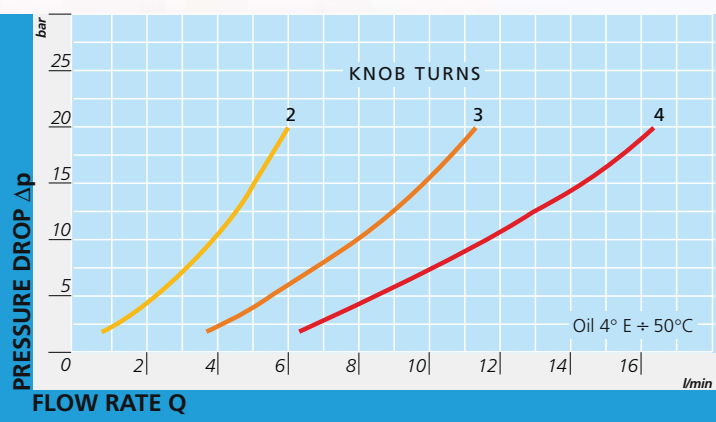
TYPE	1 (OR)	(2) BK SPECIAL
14	2050	267/2.022.00.1-38
38	2062	267/2.022.00.1-12
12	130	267/2.022.00.1-34
34	3118	267/5.022.00.1-34
100	3156	3156



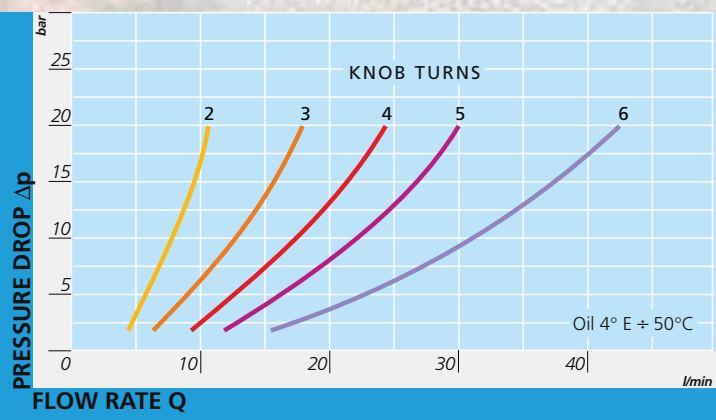
FT 267/5



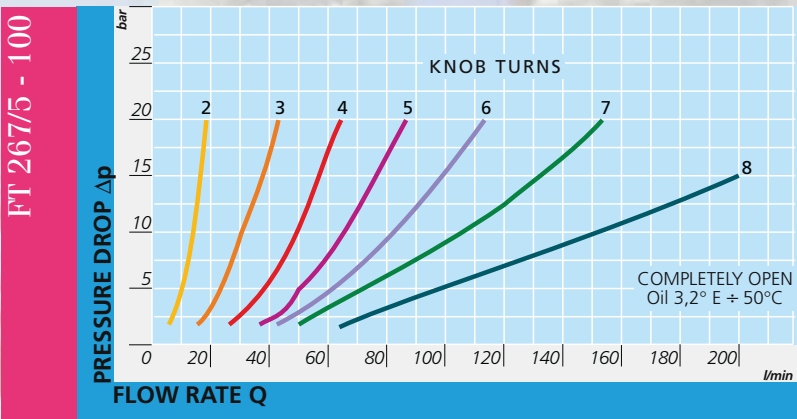
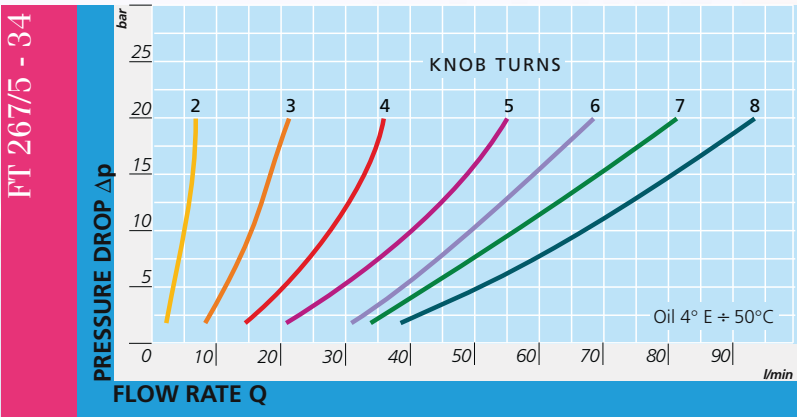
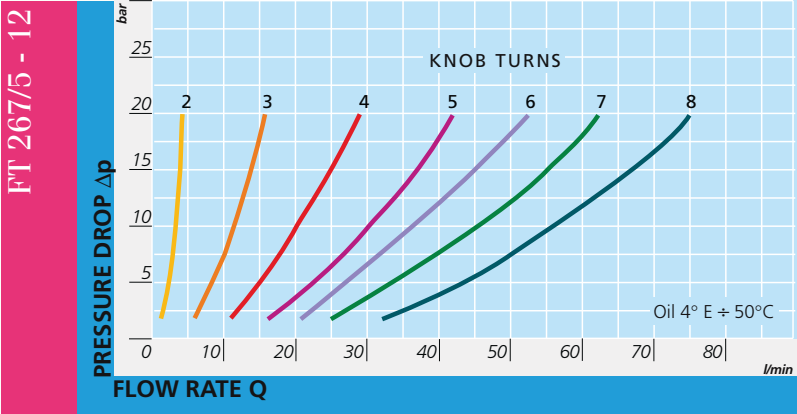
FT 267/5 - 14



FT 267/5 - 38

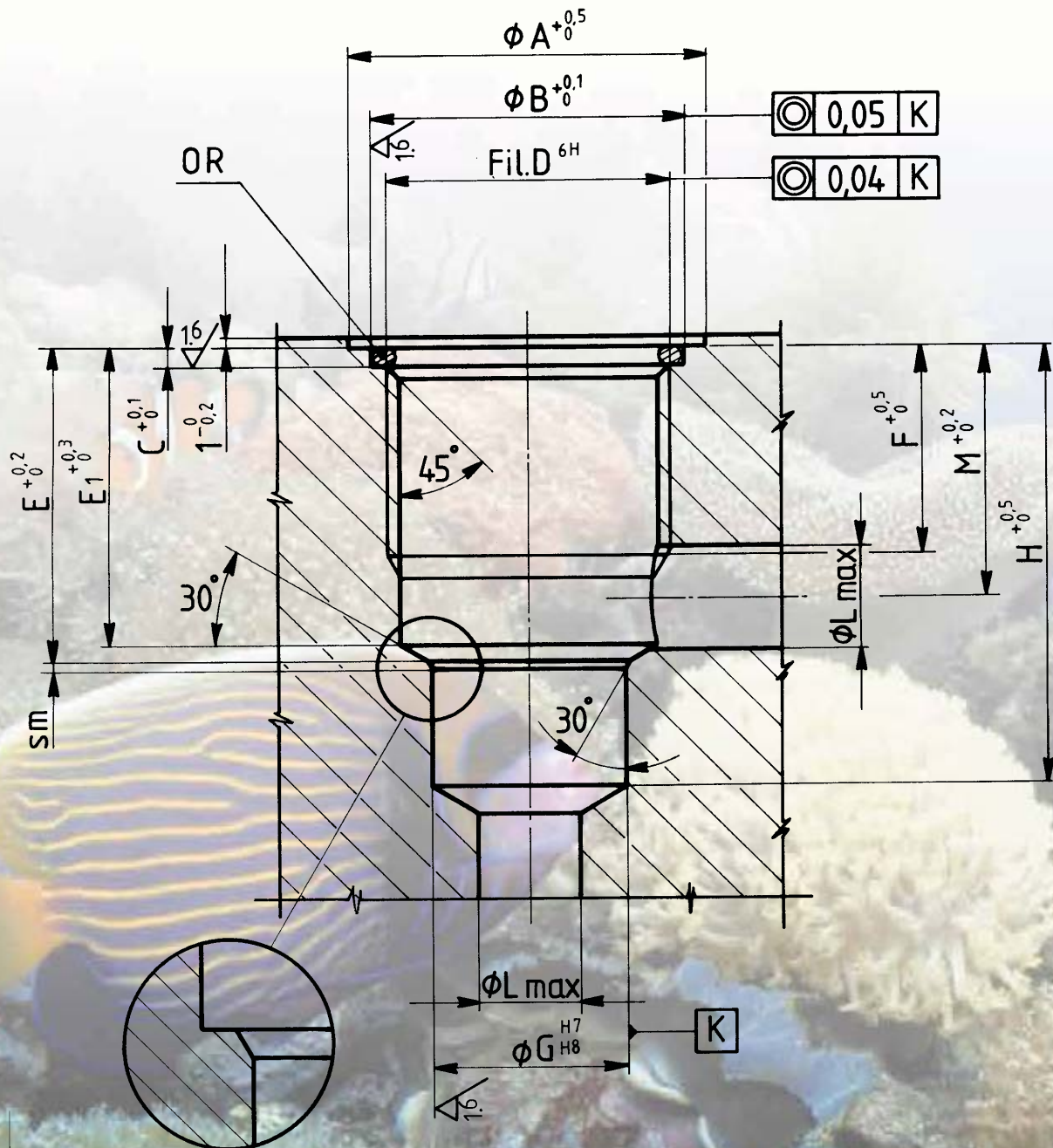


FLOW RATE CURVES



FT 267/5

Sealing realized
with OR seals
on flat seating



Manufacturing detail
possible in alternative
to the conic seat removing
the quote E1

SEATING MACHINING DRAWINGS FOR THREADED CARTRIDGE MOUNTED VALVES



FT 247/2 - FT 267/2 - FT 267/5

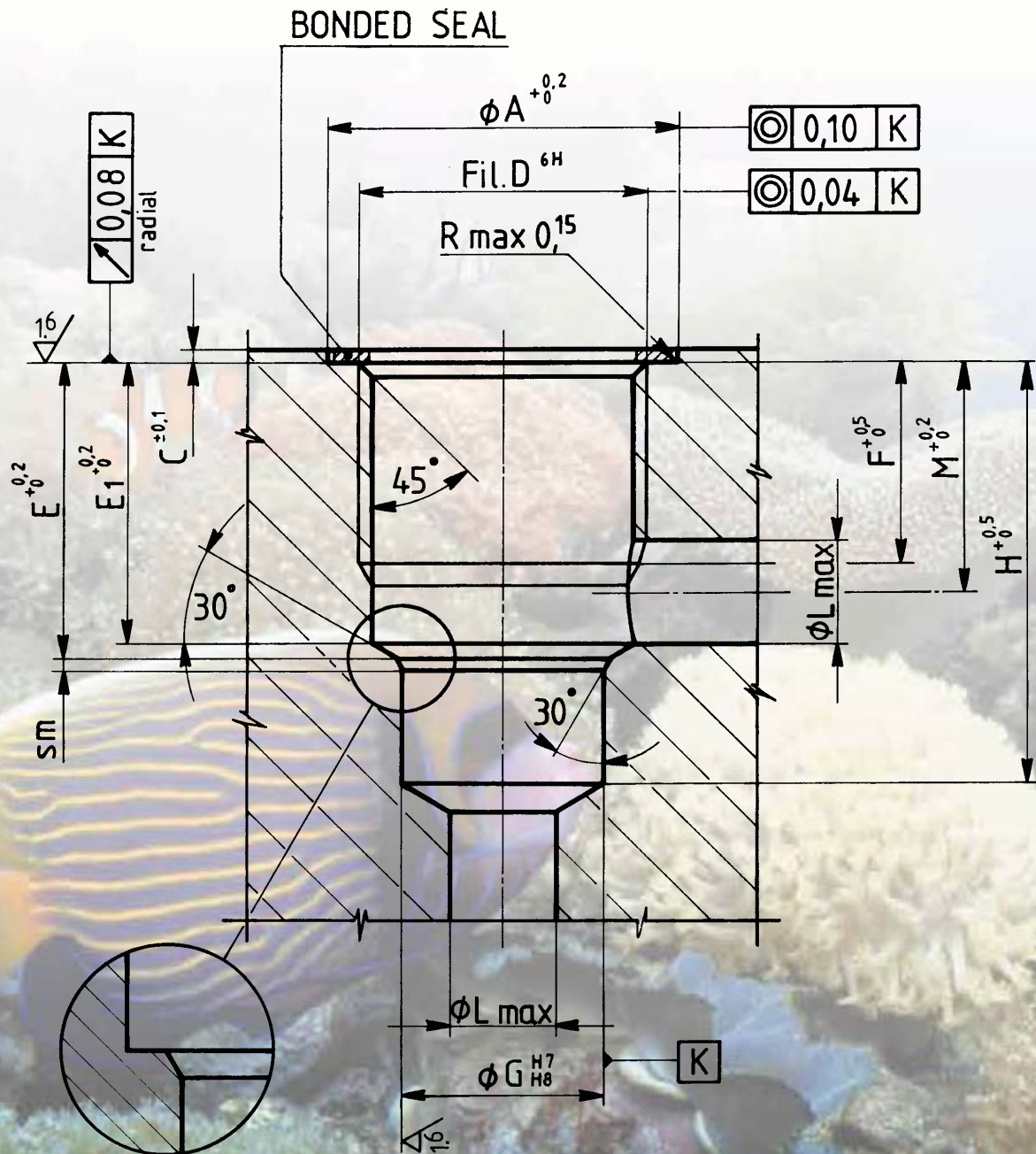
FLAT SEATING FOR OR - FT 247/2 - 267/2

TYPE	ØA	ØB	C	^D UNI 4534	E	E1	F	ØG	H	ØL	M	SM	OR
18	23	19	2	M15x1	14	13	11	12	21,5	4	11,5	0,5	3056
14	28	24	2	M20x1,5	17,5	16,5	13,5	14	28,5	5	14,5	1	3075
38	28	24	2	M20x1,5	21	20,5	13,5	16	33,5	8	16,2	1,2	3075
12	34	30	2	M27x2	30	28,5	20	19	43	10	24	1,2	3100
34	43	36	2	M33x2	32,5	32	20	27	47,5	13	25	1,2	3125
100	60	45	2	M42x2	38,5	37	23,5	35	57	16	30,5	1,5	3162

FLAT SEATING FOR OR - FT 267/5

TYPE	ØA	ØB	C	^D UNI 4534	E	E1	F	ØG	H	ØL	M	SM	OR
14	28	24	2	M20x1,5	21	20,5	13,5	16	33,5	8	16,2	1	3075
38	34	30	2	M27x2	30	28,5	20	19	43	10	24	1,2	3100
12	43	36	2	M33x2	32,5	32	20	27	47,5	12	25,5	1,2	3125
34	60	45	2	M42x2	38,5	37	23,5	35	57	16	30,5	1,5	3162
100	61	55	2,2	M52x2	46	45	27	45	67,5	20	34,5	1,5	3200

Sealing realized
with Bonded seal



Manufacturing detail
possible in alternative
to the conic seat removing
the quote E1

SEATING MACHINING DRAWINGS FOR THREADED CARTRIDGE MOUNTED VALVES



FT 247/2 - FT 267/2 - FT 267/5

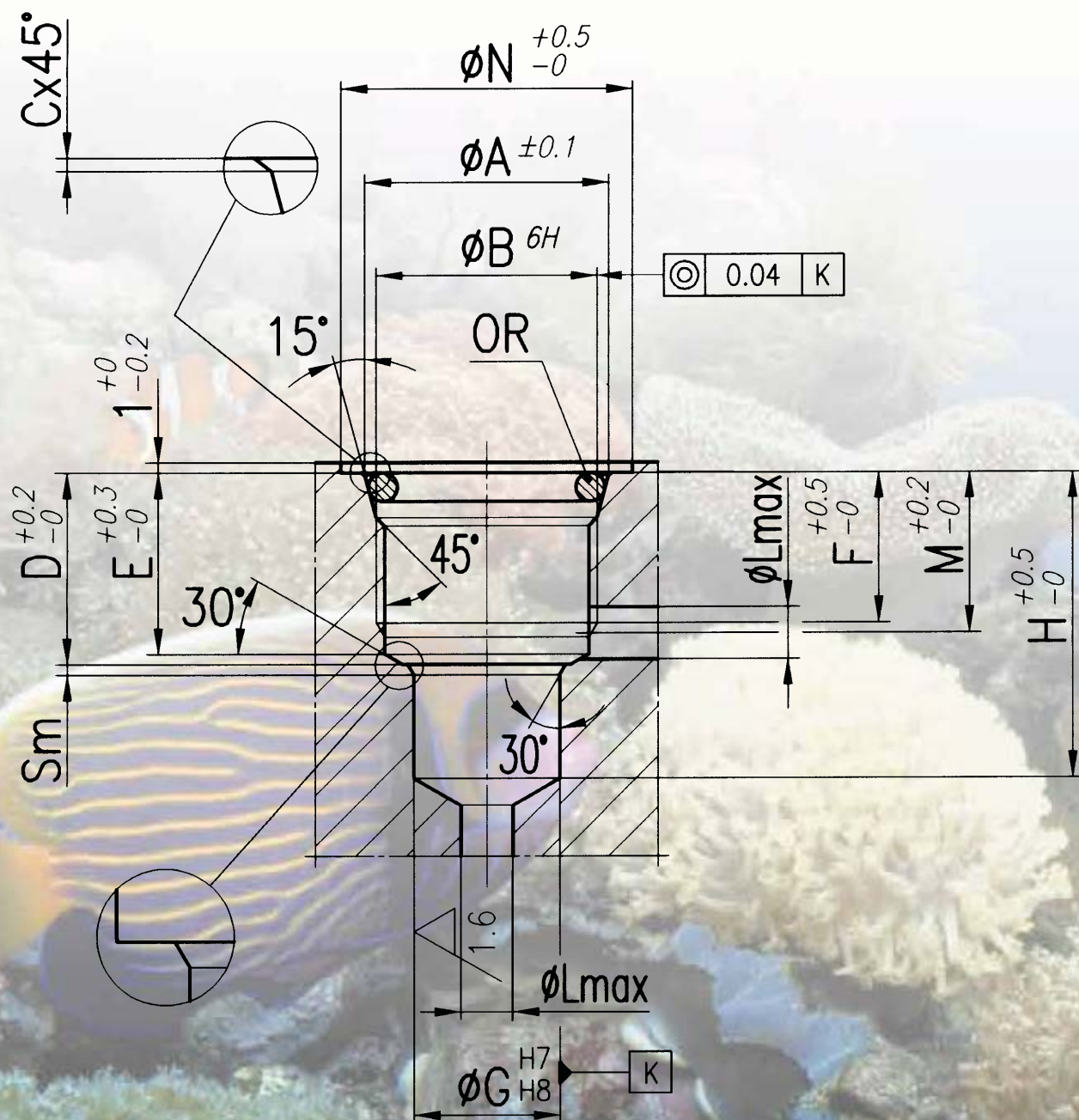
SEATING FOR BONDED SEAL - FT 247/2 - 267/2

TYPE	ØA	C	D UNI 4534	E	E1	F	ØG	H	ØL	M	SM	BONDED SEAL
18	23	1	M15x1	13	12	9	12	20	4	10,3	0,5	400-512
14	27	1	M20x1,5	16,5	15,5	12	14	27	5	13,3	1	400-513
38	27	1	M20x1,5	20	19,5	12	16	32	8	15,2	1,2	400-513
12	33	1,3	M27x2	28	26,5	18	19	41	10	22	1,2	400-520
34	40	1,3	M33x2	30,5	30	18	27	45,5	13	23	1,2	400-515
100	50	1,3	M42x2	36,5	35	21,5	35	55	16	28,5	1,5	400-516

SEATING FOR BONDED SEAL - FT 267/5

TYPE	ØA	C	D UNI 4534	E	E1	F	ØG	H	ØL	M	SM	BONDED SEAL
14	27	1	M20x1,5	20	19,5	12	16	32	8	15,2	1	400-513
38	33	1,3	M27x2	28	26,5	18	19	41	10	22	1,2	400-520
12	40	1,3	M33x2	30,5	30	18	27	45,5	12	23	1,2	400-515
34	50	1,3	M42x2	36,5	35	21,5	35	55	16	28,5	1,5	400-516

Sealing realized
with OR seals
on conical seating



Manufacturing detail
possible in alternative
to the conic seat removing
the quote E

SEATING MACHINING DRAWINGS FOR THREADED CARTRIDGE MOUNTED VALVES



FT 247/2 - FT 267/2 - FT 267/5

CONICAL SEATING FOR OR - FT 247/2 - FT 267/2

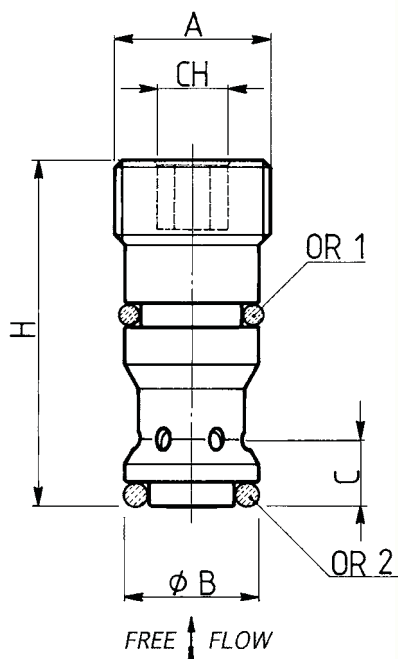
TYPE	ØA	ØB UNI 4534	C	D	E	F	ØG	H	ØL	M	ØN	SM	OR
18	16,5	M15x1	0,25	14	13	11	12	21,5	4	11,5	23	0,5	2050
14	22,3	M20x1,5	0,25	17,5	16,5	13,5	14	28,5	5	14,5	28	1	3068
38	22,3	M20x1,5	0,25	21	20,5	13,5	16	33,5	8	16,2	28	1,2	3068
12	29,1	M27x2	0,3	30	28,5	20	19	43	10	24	34	1,2	132
34	36	M33x2	0,3	32,5	32	20	27	47,5	13	24	43	1,2	4112
100	45	M42x2	0,3	38,5	37	23,5	35	57	16	29	60	1,5	4150

CONICAL SEATING FOR OR - FT 267/5

TYPE	ØA	ØB UNI4534	C	D	E	F	ØG	H	ØL	M	ØN	SM	OR
14	22,3	M20x1,5	0,25	21	20,5	13,5	16	33,5	8	16,2	28	1,2	3068
38	29,1	M27x2	0,3	30	28,5	20	19	43	10	24	34	1,2	132
12	36	M33x2	0,3	32,5	32	20	27	47,5	13	25	43	1,2	4112
34	45	M42x2	0,3	38,5	37	23,5	35	57	16	29	60	1,5	4150
100	55	M52x2	0,3	46	45	27	45	67,5	20	34,5	61	1,5	4187



FT 267/6

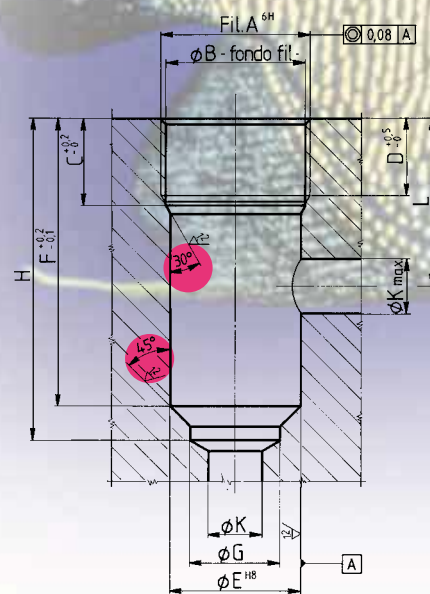


MATERIALS

BODY	11 S MN Pb 30 - UNI EN 10087
CHECK VALVE	38 NI CR Mo4 - UNI EN 10083
SPRING	C85 - UNI EN 10089
SCREW PLUG	11 S MN Pb 30 - UNI EN 10087

EXAMPLE FOR ORDERING

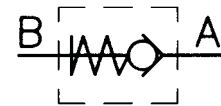
	CODE	TYPE	SEAL VITON
STEEL	FT 267/6	14	V
STAINLESS STEEL	FT 2267/6	12	-



DRAWING
FOR SEAT VALVE
MANUFACTURING

DIMENSIONS

TYPE	A UNI4534	Ø B	C	H	CH	OR 1	OR 2	WEIGHT KG
14	M22x1,5	19	9,5	49	8	3056	115	0,80
38	M27x2	24	10,5	56	10	3075	3068	0,140
12	M33x2	29	13	67	10	3093	3087	0,265
34	M42x2	38	17	80,5	12	4125	4112	0,545



THREADED CARTRIDGE MOUNTED SINGLE-ACTING VALVES

They allow free flow in one direction, shutting-off the return flow in the opposite direction. Release pressure 0,35 bar.

On request

- Version in AISI 316 code FT 2267/6
- Complete with Viton seals (V)



FT 2267/6

VALVE SEATING SIZE TABLE

TYPE	A UNI 4534	ØB	C	D	ØE	F	ØG	H	ØK	MIN	L	MAX
14	M22x1,5	20,5	16,5	13,5	19	45,5	10	52	8	33,5		36
38	M27x2	25	18	16	24	52,5	15	59	10	36,5		40
12	M33x2	31	21	17	29	63,5	20	71	12	45		49
34	M42x2	40	25	20	38	76	26	85,5	15	52		59

TECHNICAL DATA

TYPE	MAX. WORKING PRES- SURE BAR	MIN. BURSTING PRES- SURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE µM ABSOLUTE
14	320	1300	-20°/+100°	25
38	320	1300	-20°/+100°	25
12	320	1300	-20°/+100°	25
34	320	1300	-20°/+100°	25
100	320	1300	-20°/+100°	25

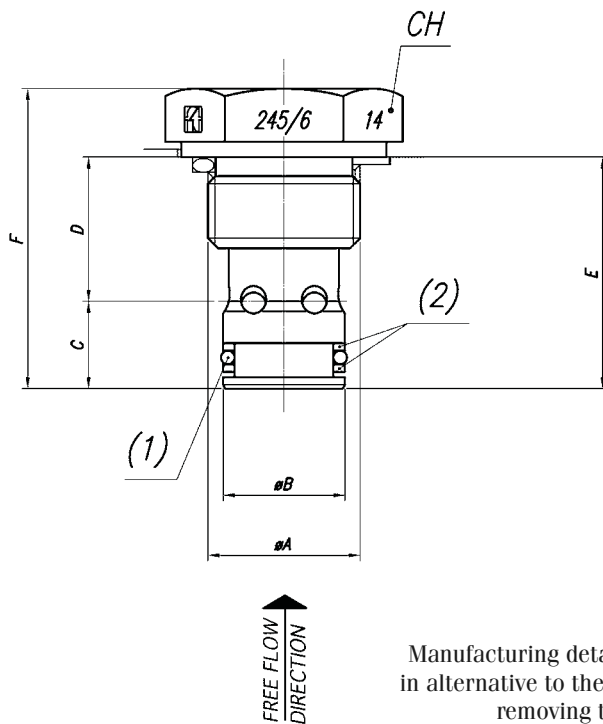


MATERIALS

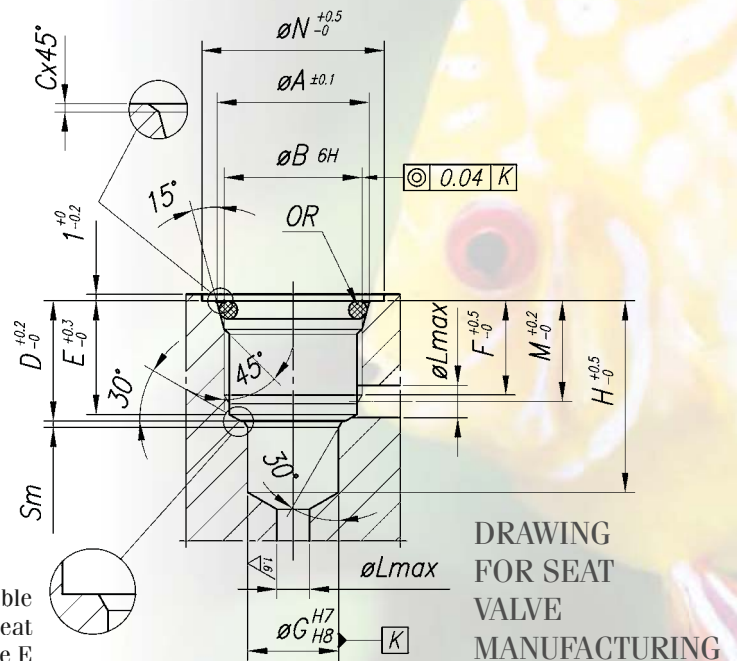
BODY	11 S MN Pb 30 - UNI EN 10087
HECK VALVE	38 NI CR MO4 - UNI EN 10083
SPRING	C85 - UNI EN 10089
SCREW PLUG	11 S MN Pb 30 - UNI EN 10087

EXAMPLE FOR ORDERING

	CODE	TYPE	SEAL VITON
STEEL	FT 245/6	14	V
STAINLESS STEEL	FT 2245/6	12	-

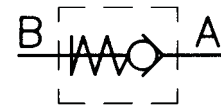


Manufacturing detail possible
in alternative to the conic seat
removing the quote E



DIMENSIONS

TYPE	ØA	ØB	C	D	E	F	CH	OR 1	OR 2	WEIGHT KG
14	M20x1,5	16	11,5	19	30,5	36,5	27	2050	SPECIAL 267/2.022.00.1-38	0,070
38	M27x2	19	16,5	23,5	40	47	32	2062	SPECIAL 267/2.022.00.1-12	0,140
12	M33x2	27	19	25,5	44,5	58,5	41	130	SPECIAL 267/2.022.00.1-34	-
34	M42x2	35	22	80,5	52,5	68	50	3118	SPECIAL 267/2.022.00.1-34	-



CARTRIDGE SINGLE-ACTING FLOW CONTROL VALVE

The valve assembled into a hydraulic circuit permits the free flow in a single direction blocking the passage in the opposite one. The valve is available with different pressure settings (0,5 standard and 2-4-6-8-10 bar).



FT 245/6

VALVE SEATING SIZE TABLE

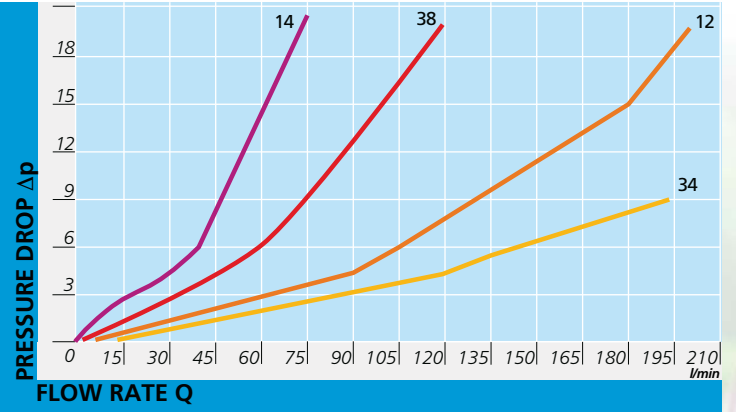
TYPE	ØA	ØB	C	D	E	F	ØG	H	ØL	M	ØN	SM	OR
14	22,3	M20x1,5	0,25	21	20,5	13,5	16	33,5	8	16,2	28	1,2	3068
38	29,1	M27x2	0,3	30	28,5	20	19	43	10	24	34	1,2	132
12	36	M33x2	0,3	32,5	32	20	27	47,5	13	25	43	1,2	4112
34	45	M42x2	0,3	38,5	37	23,5	35	57	16	29	60	1,5	4150

TECHNICAL DATA

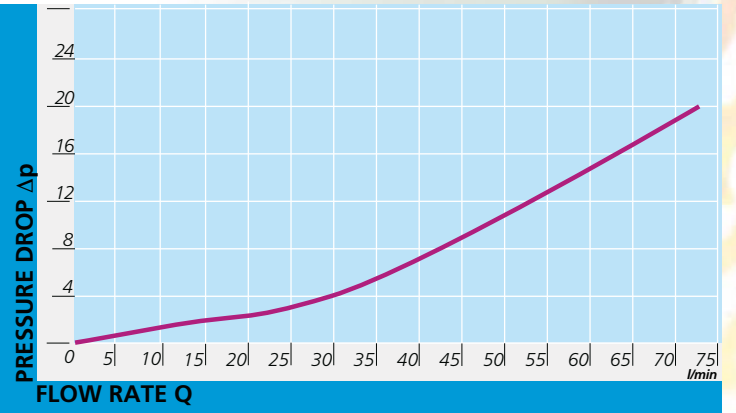
TYPE	MAX WORKING PRESSURE BAR	MIN BURSTING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE µM ABSOLUTE
14	320	1300	-20°/+100°	25
38	320	1300	-20°/+100°	25
12	320	1300	-20°/+100°	25
34	320	1300	-20°/+100°	25



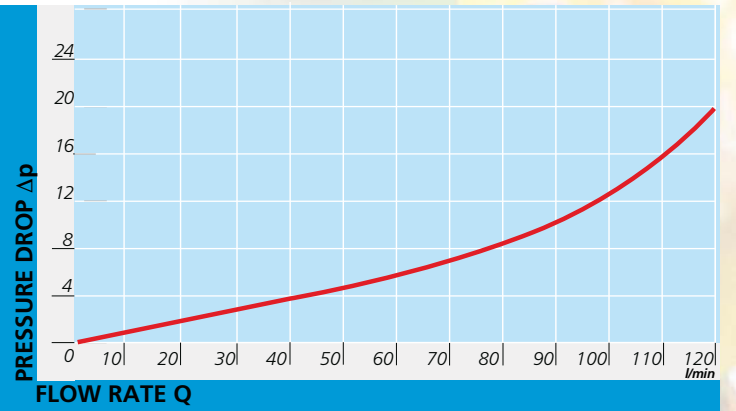
FT 245



FT 245-14



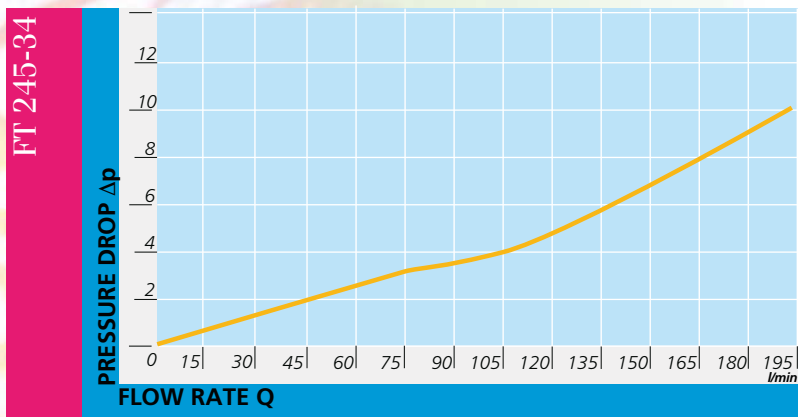
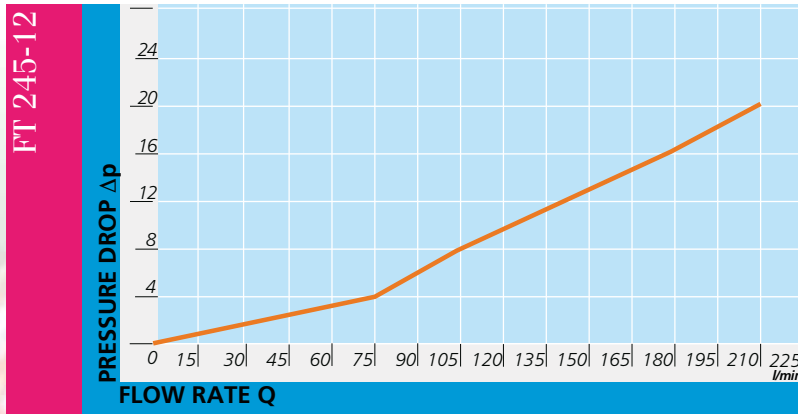
FT 245-38

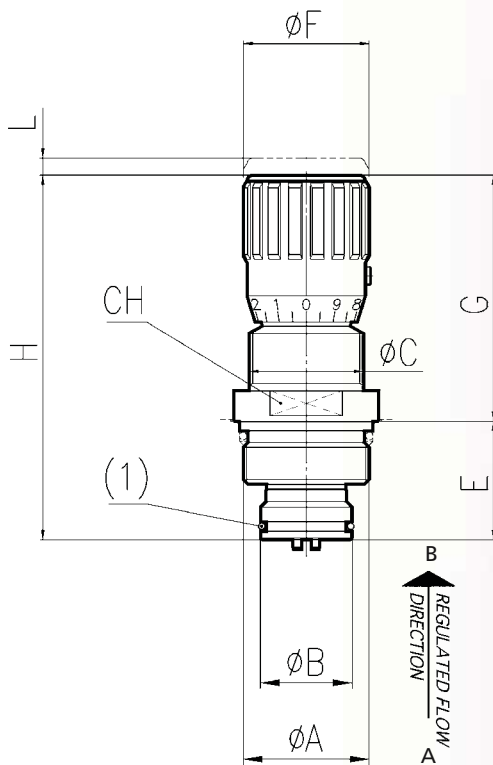


FLOW RATE CURVES



FT 245/6





MATERIALS

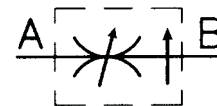
BODY BASE	11S MN PB 30 - UNI EN 10087
COMPENSATION UNIT	38 NI CR MO 4 - UNI EN 10083
OR	NITRILE
ANTIEXTRUSION RING	PTFE
KNOB	GD AL SI 12 - UNI EN AB 46100

EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL
STEEL	FT 287/2	38	V

DIMENSIONS

TYPE	ØA UNI 4534	ØB	ØC	E	G	ØF	H	L	CH	(1) OR	WEIGHT KG
14	M33x1,5	24	M30x1,5	31	64,5	33	95,5	4,5	32	2081	0,350
38	M39x1,5	30	M35x1,5	34,5	82	38	116,5	6	38	2106	0,580
12	M48x2	35	M40x1,5	42	92,5	47	134,5	6,5	45	3118	0,960
34	M55x2	40	M50x1,5	49	115	58	164	7,5	55	3137	1,700



CARTRIDGE PRESSURE COMPENSATED FLOW CONTROL VALVES

Pressure compensated flow control valves, to insert in modular units in line. They are essentially composed of the central body of valves series FT 277/2 which may be screwed in units preset by the user.

The construction and functional characteristics reflect exactly those described for the two inlet valves.

It is recommended to keep them in their protective wrapping until the mounting, in order to avoid possible drawbacks caused by eventual entry of particles into the delicate and essential parts for a good working.

On page 94 is proposed a machining scheme for the embedding seat, which has to be observed to ensure the necessary accuracy of the valve.

The constructive system allows the user, already provided with those versions, either to request the two inlet base bodies only, so as to allow their quick transformation, or to store the single standard components to assemble in the various types according to the need.

On request

- Viton seals (V)



FT 287/2

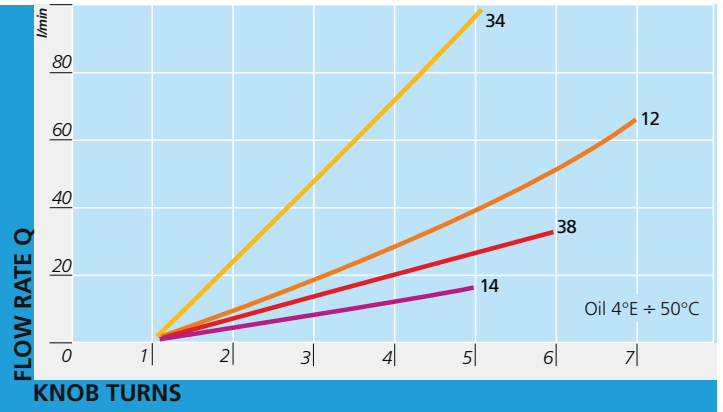
TECHNICAL DATA

TYPE	MAX. WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE µm ABSOLUTE
14	320	7,5	-20°/+70°	25
38	320	10	-20°/+70°	25
12	320	12	-20°/+70°	25
34	320	15	-20°/+70°	25

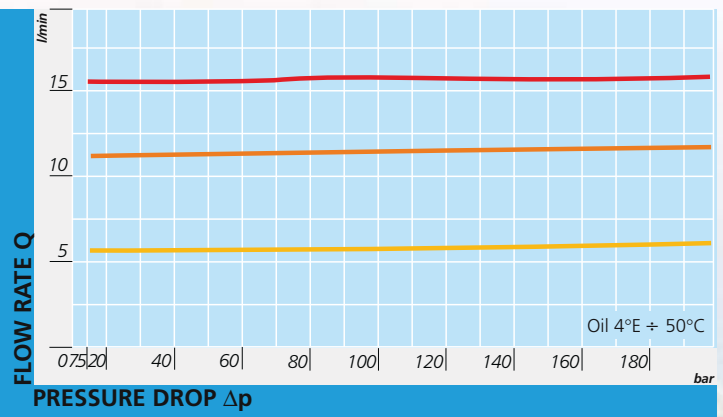


FT 287/2

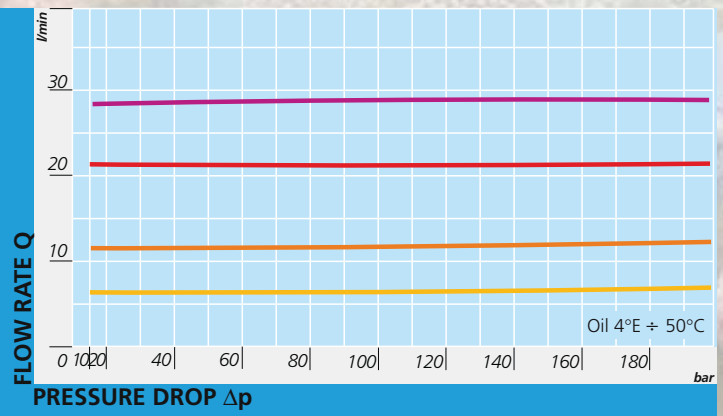
FT 287



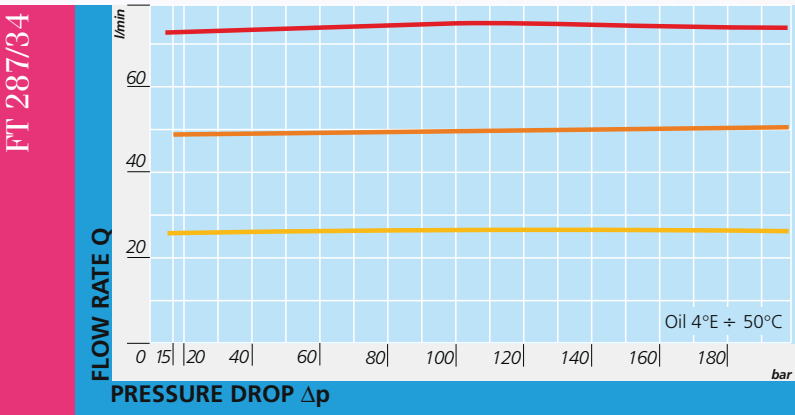
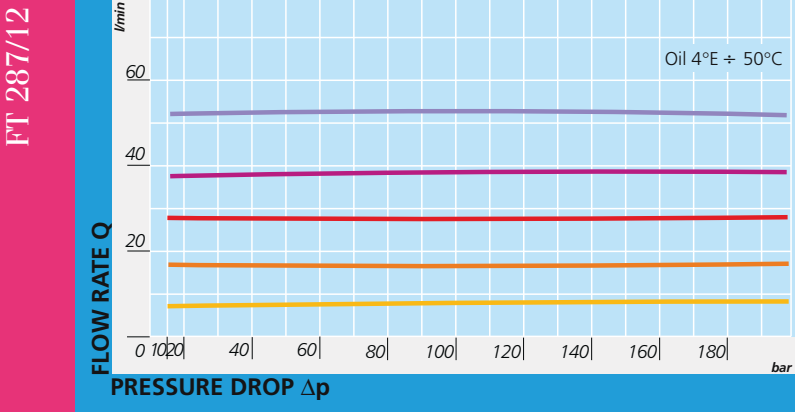
FT 287/14



FT 287/38



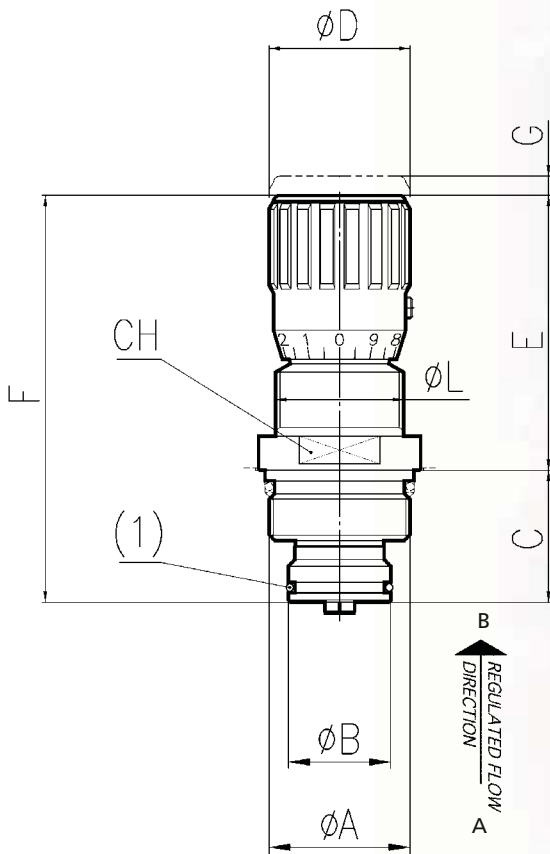
FLOW RATE CURVES



FT 287/2



FT 297/2



MATERIALS

BODY BASE	11 S MN Pb 30 - UNI EN 10087
COMPENSATION UNIT	38 NI CR Mo 4
OR	NITRILE
ANTIEXTRUSION RING	PTFE
Knob	GD AL SI 12 - UNI EN AB 46100

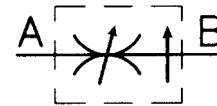
EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL
STEEL	FT 297/2	14	V



DIMENSIONS

TYPE	ϕA UNI 4534	ϕB	C	ϕD	E	F	G	ϕL	CH	(1) OR	WEIGHT KG
14	M33x1,5	24	31	33	64,5	95,5	4,5	M30x1,5	32	2081	0,350



CARTRIDGE MOUNTED PRESSURE COMPENSATED MICROFINE FLOW CONTROL VALVES

Pressure compensated flow control valves, to insert in modular units in line. They are essentially composed of a central body which may be screwed in units preset by the user.

The construction and functional characteristics reflect exactly those of valves series FT 287.

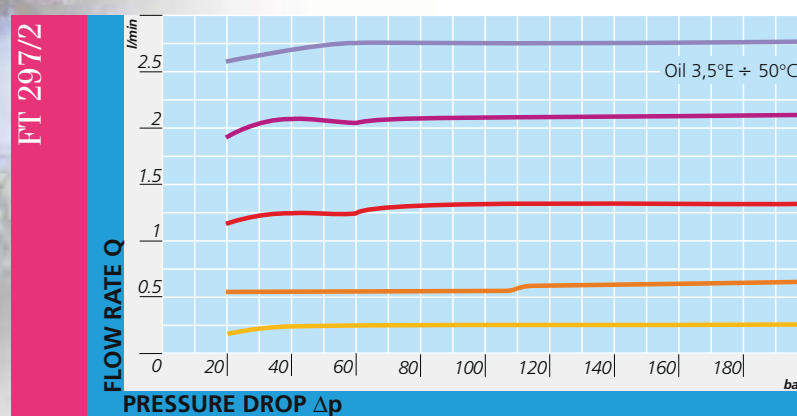
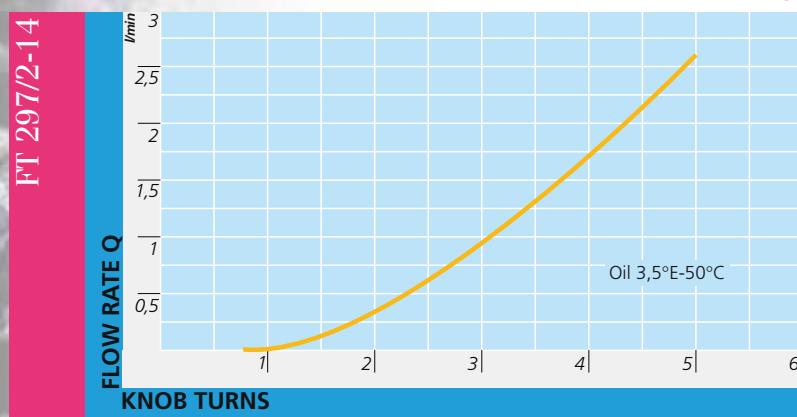
It is recommended to keep them in their protective wrapping until the mounting, in order to avoid possible drawbacks caused by eventual entry of particles into the delicate and essential parts for a good working.

On request

- Viton seals (V)



FT 297/2



TECHNICAL DATA

TYPE	MAX. WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μm ABSOLUTE
14	320	7,5	-20°/+70°	25

Technical drawing of a mechanical part showing a cross-section with dimensions and tolerances. The drawing includes the following features:

- Dimensions and Tolerances:**
 - $\phi A^{+0.5}_0$ (Overall width)
 - ϕB_{H8} (Inner hole diameter)
 - ϕL_{max} (Length of the central section)
 - ϕG_{H7} (Bottom hole diameter)
 - $H^{+0.2}_{-0.1}$ (Total height)
 - $M^{+0.2}_0$ (Height of the upper section)
 - F^{+1}_0 (Distance from the top surface to the center of the bottom hole)
 - $E^{+0.3}_0$ (Distance from the top surface to the top of the bottom hole)
 - $C^{0.15}_0$ (Distance from the top surface to the top of the bottom hole)
 - S_m (Distance from the top surface to the top of the bottom hole)
- Geometric Features:**
 - Top surface: 30° chamfer.
 - Inner hole: 30° chamfer.
 - Bottom hole: 30° chamfer.
 - Internal threads: 45° and 30° chamfers.
 - Surface texture: R_{12} (Surface roughness).
 - Material: $Fil. D_{6H}$ (Material and hardness).
- Surface Finish and Tolerances:**
 - Top surface: 0.04 K (Surface finish).
 - Inner hole: 0.04 K (Surface finish).
 - Bottom hole: K (Surface finish).

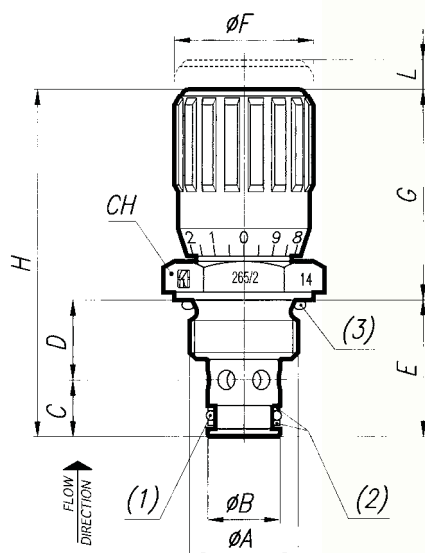
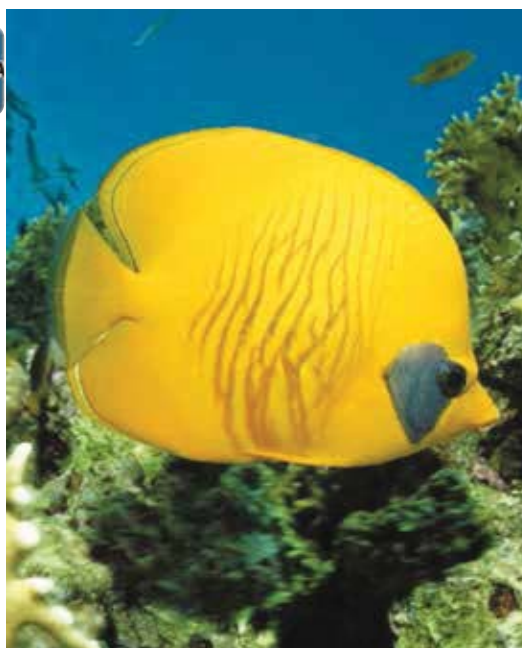
DRAWING OF CAVITY MACHINE FOR CARTRIDGE MOUNTED VALVES



FT 287/2 - FT 297/2



TYPE	ØA	ØB	C	D UNI 4535	E	F	ØG	H	ØL	M	ØR	SM
14	39	35	5,2	M33x1,5	24	18	24	35,2	6,5	20	3118	0,8
38	44	40,5	5,2	M39x1,5	27,5	19	30	40	9	22,5	3143	0,8
12	53	49	6,5	M48x2	33,5	23,5	35	49	11	27,5	3175	0,8
34	63	58	7	M55x2	40	27	40	57	13,5	32,5	155	1



MATERIALS

BODY	11 S MN Pb 30 - UNI EN 10087
NEEDLE	1 C 40 - UNI 8373
OR	NITRILE
ANTIEXTRUSION RINGS	PTFE
KNOB	GD AL SI 12 - UNI EN AB 46100
KNOB (MP)	ABS

EXAMPLE FOR ORDERING

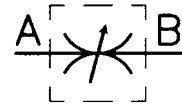
	CODE	TYPE	VITON SEAL	KNOB IN PLASTIC
STEEL	FT 265/2	34	V	MP
STAINLESS STEEL	FT 2265/2	34	-	MP

SEAL KIT ON THE SEATING

TYPE	1 (OR)	2 (BK)	(3)
34	2037	266/6.022.00.1-34	2068
78	2050	267/2.022.00.1-38	3075

DIMENSIONS

TYPE	ØA UNI 4534	ØB	C	D	E	ØF	ØF1	G	H	L	CH	WEIGHT KG
34	3/4"-16 UNF	12,7	15,3	12,7	28	27	50	40,7	68,7	6	24	0,112
78	7/8"-14 UNF	15,8	17,5	15	32,5	33	70	46	78,5	8	27	0,115

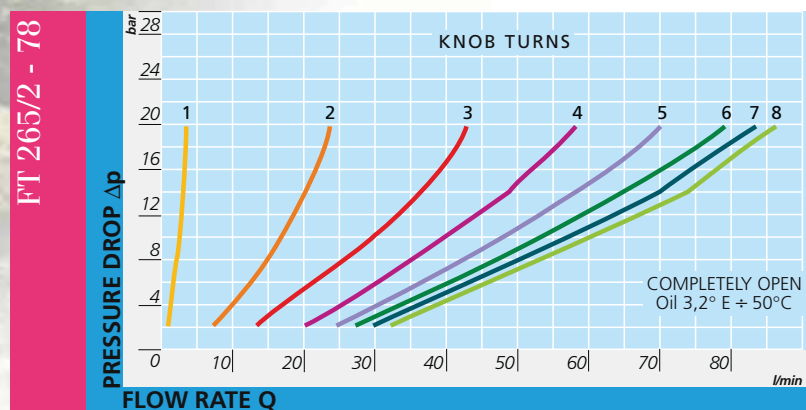
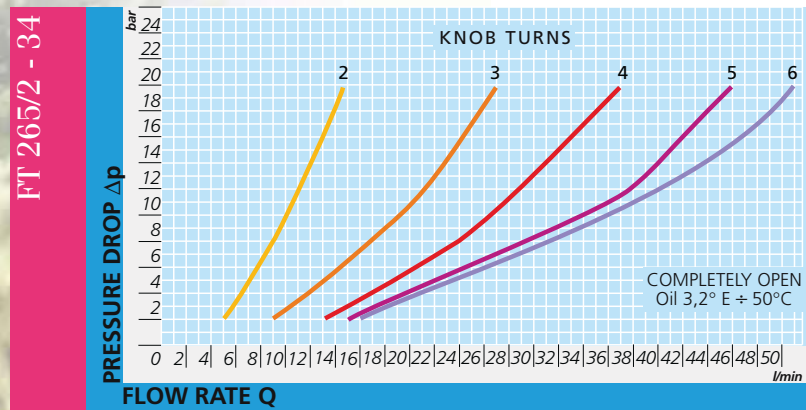


HIGH FLOW RATE CARTRIDGE MOUNTED DOUBLE-ACTING CONTROL VALVES MAX 350 BAR

They control a flow in both directions.

On request

- Complete with Viton seals (V)
- Knob in ABS (mp)
- Version in AISI 316 code FT 2265/2



TECHNICAL DATA

TYPE	FLOW SECTION CM ²	MAX. WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μM ABSOLUTE
34	0,20	320	1 300	-20°/+100°	25
78	0,50	320	1 300	-20°/+100°	25



MATERIALS

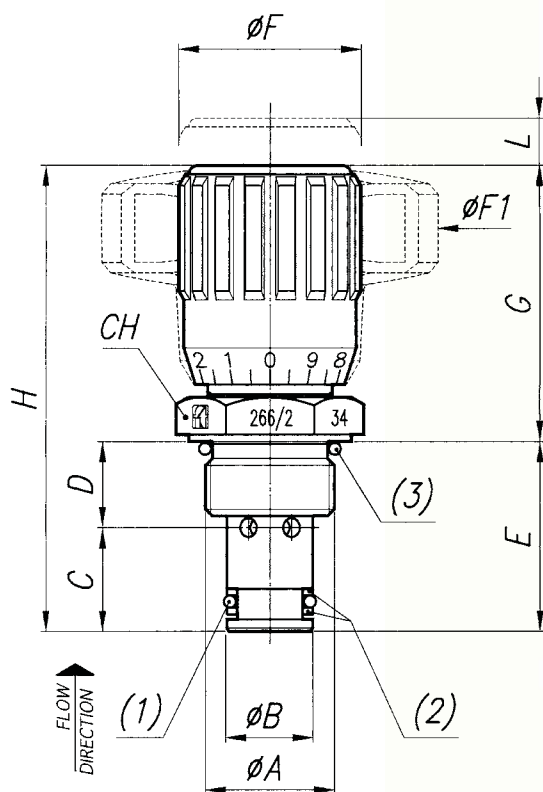
BODY	11 S MN Pb 30 - UNI EN 10087
NEEDLE	1 C 40 - UNI 8373
OR	MESCOLA NITRICA
ANTIEXTRUSION RINGS	PTFE
KNOB	GD AL SI 12 - UNI EN AB 46100
KNOB (MP)	ABS

EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL	KNOB IN PLASTIC
STEEL	FT 266/2	34	V	MP
STAINLESS STEEL	FT 2266/2	34	-	MP

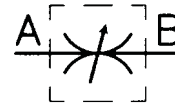
SEAL KIT ON THE SEATING

TYPE	1 (OR)	2 (BK)	(3)
34	2037	266/6.022.00.1-34	2068
78	2050	267/2.022.00.1-38	3075



DIMENSIONS

TYPE	ØA UNI 4534	ØB	C	D	E	ØF	ØF1	G	H	L	CH	WEIGHT KG
34	3/4"-16 UNF	12,7	15,3	12,7	28	27	50	40,7	68,7	6	24	0,112
78	7/8"-14 UNF	15,8	17,5	15	32,5	33	70	46	78,5	8	27	0,115

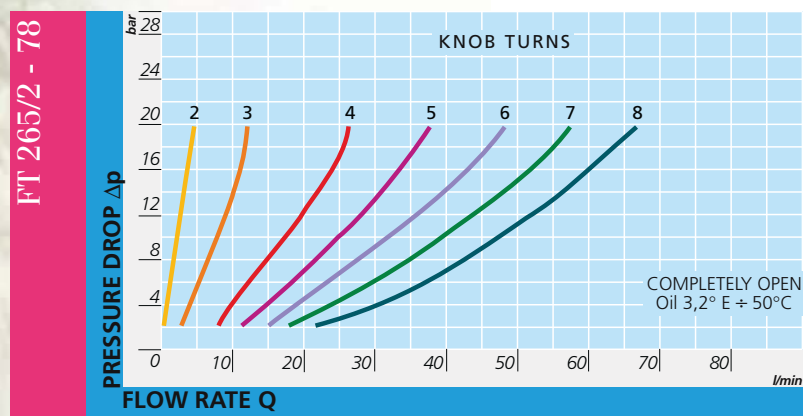
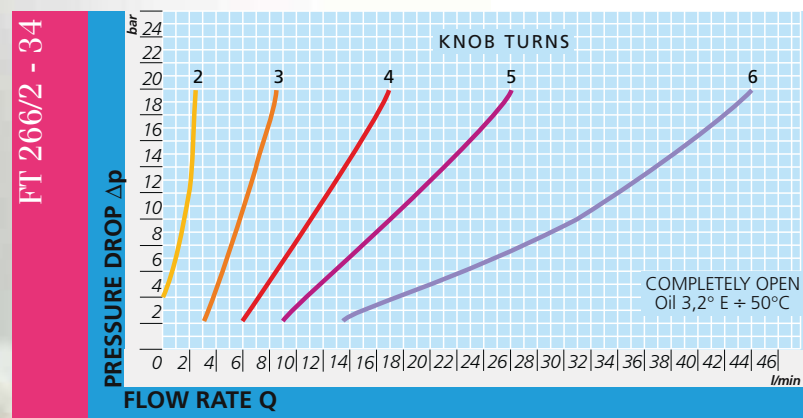


CARTRIDGE MOUNTED DOUBLE-ACTING CONTROL VALVES MAX 350 BAR

They control a free flow in both directions.

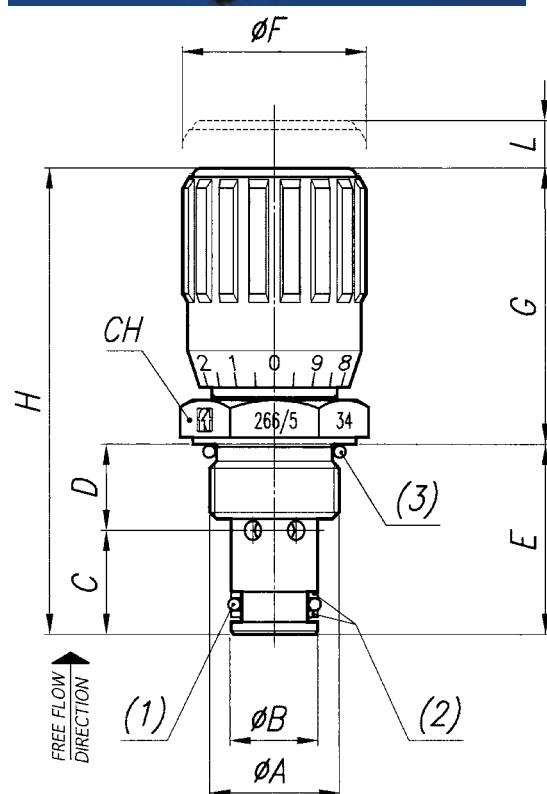
On request

- Complete with Viton seals (V)
- Knob in ABS (mp)
- Version in AISI 316 code FT 2266/2



TECHNICAL DATA

TYPE	FLOW SECTION CM ²	MAX. WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μ M ABSOLUTE
34	0,20	320	1300	-20°/+100°	25
78	0,50	320	1300	-20°/+100°	25



MATERIALS

BODY	11 S MN Pb 30 - UNI EN 10087
NEEDLE	38 Ni CR Mo 4 - UNI - EN 10083
OR	NITRILE
ANTIEXTRUSION RING	PTFE
CHECK VALVE	38 Ni CR Mo 4 - UNI - EN 10083
SPRING	C85 - UNI EN 10089
KNOB	GD AL Si 12 - UNI EN AB 46100
KNOB (MP)	ABS

EXAMPLE FOR ORDERING

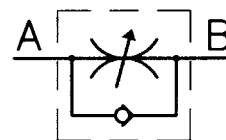
	CODE	TYPE	VITON SEAL	KNOB IN PLASTIC
STEEL	FT 266/5	34	V	MP
STAINLESS STEEL	FT 2266/5	34	-	MP

SEAL KIT ON THE SEATING

TYPE	1 (OR)	2 (BK)	(3)
34	2037	266/6.022.00.1-34	2068
78	2050	267/2.022.00.1-38	3075

DIMENSIONS

TYPE	ØA UNI 4534	ØB	C	D	E	ØF	G	H	L	CH	WEIGHT KG
34	3/4"-16 UNF	12,7	15,3	12,7	28	27	40,7	68,7	6	24	0,112
78	7/8"-14 UNF	15,8	17,5	15	32,5	33	46	78,5	8	27	0,115



CARTRIDGE MOUNTED SINGLE-ACTING CONTROL VALVES MAX 350 BAR

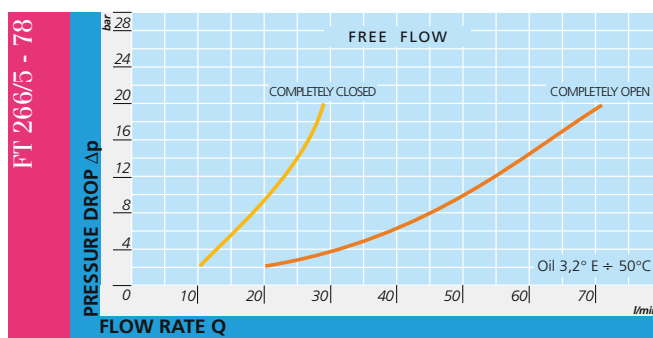
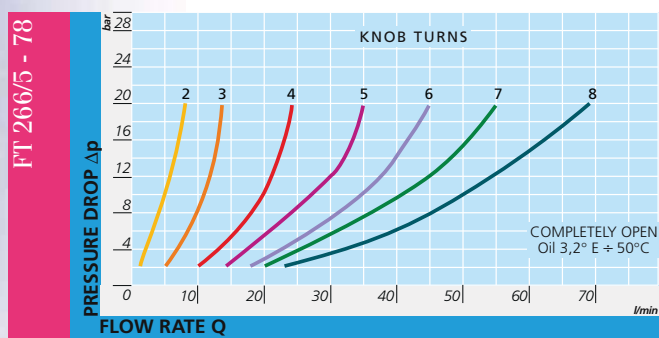
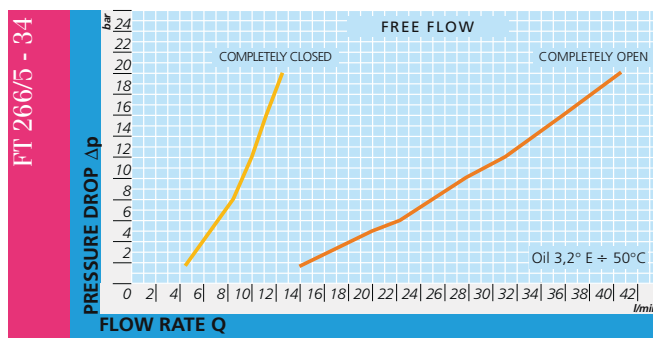
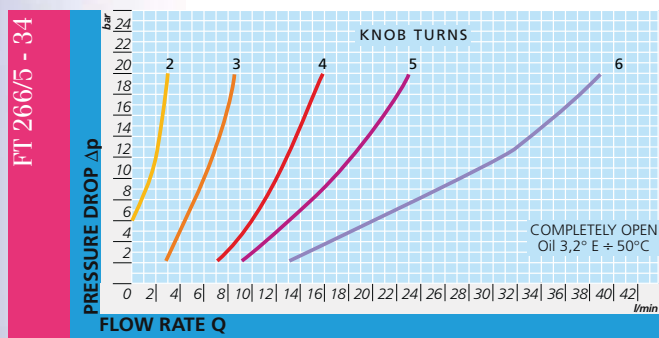
They control and eventually shut-off the flow in one direction, allowing a free return in the opposed direction.

On request

- Complete with Viton seals (V)
- Knob in ABS (mp)
- AISI 316 Stainless steel version FT 2266/5



FT 266/5-UNF



TECHNICAL DATA

TYPE	FLOW SECTION cm^2	MAX. WORKING PRESSURE BAR	MIN. BURSTING PRESSURE BAR	WORKING TEMPERATURE $^{\circ}\text{C}$	FILTRATION GRADE μm ABSOLUTE
34	0,20	320	1300	-20°/+100°	25
78	0,50	320	1300	-20°/+100°	25



MATERIALS

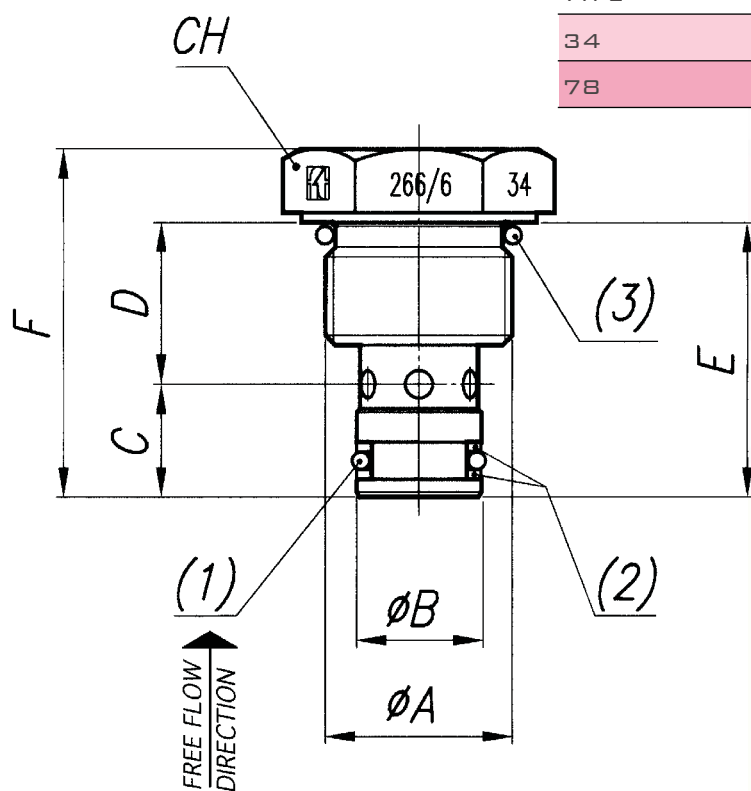
BODY	11 S MN Pb 30 - UNI EN 10087
BALL	UNI 100 C 6
SPRING	AISI 302
BALL GUIDE	NYLON 66 + CARBON FIBRE

EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL	KNOB IN PLASTIC
STEEL	FT 266/6	34	V	MP
STAINLESS STEEL	FT 2266/6	34	-	MP

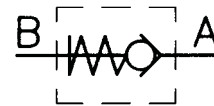
SEAL KIT ON THE SEATING

TYPE	1 (OR)	2 (BK)
34	2037	266/6.022.00.1-34
78	2050	267/2.022.00.1-38



DIMENSIONS

TYPE	ØA UNI 4534	ØB	C	D	E	F	CH	(3)
34	3/4"-16 UNF	12,7	11,5	16,5	28	35,5	24	2068
78	7/8"-14 UNF	158	12,5	20	32,5	40	27	3075



CARTRIDGE MOUNTED SINGLE-ACTING CONTROL VALVES MAX 350 BAR

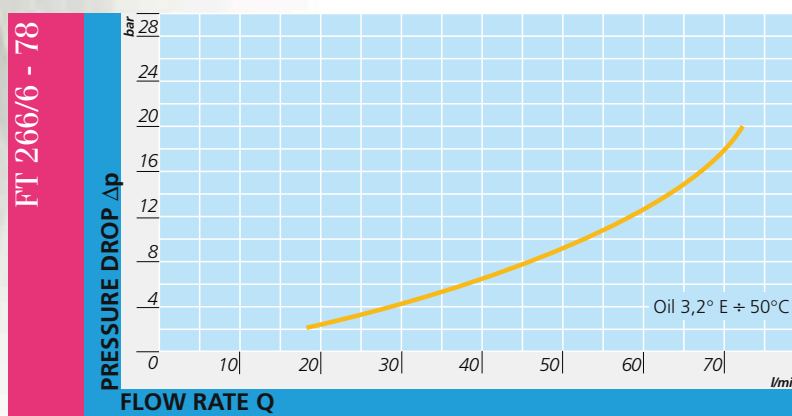
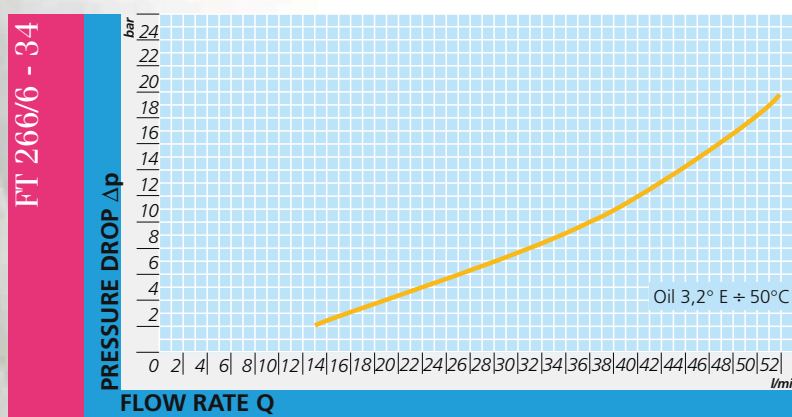
They allow the flow in one direction, shutting-off the same in the opposed direction.

On request

- Complete with Viton seals (V)
- AISI 316 Stainless steel version

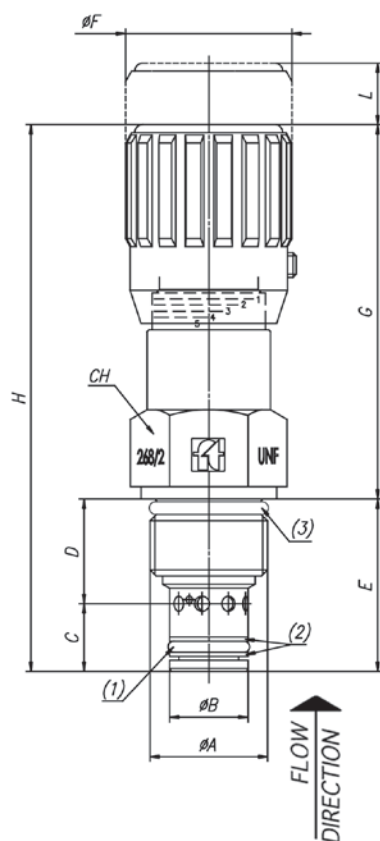


FT 266/6-UNF



TECHNICAL DATA

TYPE	MAX. WORKING PRES- SURE BAR	MIN. BURSTING PRES- SURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μm ABSOLUTE
34	320	1300	-20°/+100°	25
78	320	1300	-20°/+100°	25



MATERIALS

BODY	11 S MN Pb 30 - UNI EN 10087
NEEDLE	1 C 40 - UNI 8373
OR	NITRILE
ANTIEXTRUSION RING	PTFE
KNOB	GD - AL SI 12 - UNI EN AB 46100
KNOB (MP)	ABS

EXAMPLE FOR ORDERING

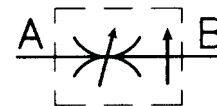
	CODE	TYPE	VITON SEAL	KNOB IN PLASTIC
STEEL	FT 268/2	34	V	MP

SEAL KIT ON THE SEATING

TYPE	1 (OR)	2 (BK)
34	2037	266/6.022.00.1-34
78	2050	267/2.022.00.1-38

DIMENSIONS

TYPE	ØA UNI 4534	ØB	C	D	E	ØF	G	H	L	CH	(3)
34	3/4"-16 UNF	12,7	11	17	28	27	67	95	7	22	2068
78	7/8"-14 UNF	15,8	11,7	20,8	32,5	33	80	112,5	10	27	3075



CARTRIDGE MOUNTED PRESSURE COMPENSATED TWO-WAY LOW FRICTION CONTROL VALVES MAX 350 BAR

Pressure compensated flow control valves, to insert in modular units in line. The construction and functional characteristics reflect exactly those described for the two inlet valves.

It is recommended to keep them in their protective wrapping until the mounting, in order to avoid possible drawbacks caused by eventual entry of particles into the delicate and essential parts for a good working. On page 100 is proposed a machining scheme for the embedding seat, which has to be observed to ensure the necessary accuracy of the valve.

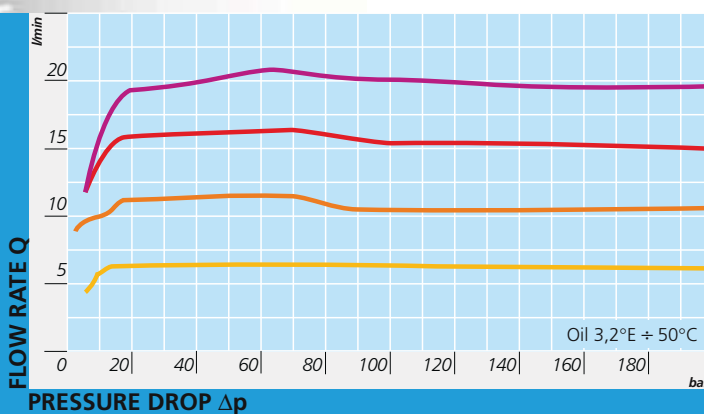
On request

- Viton seals (V)

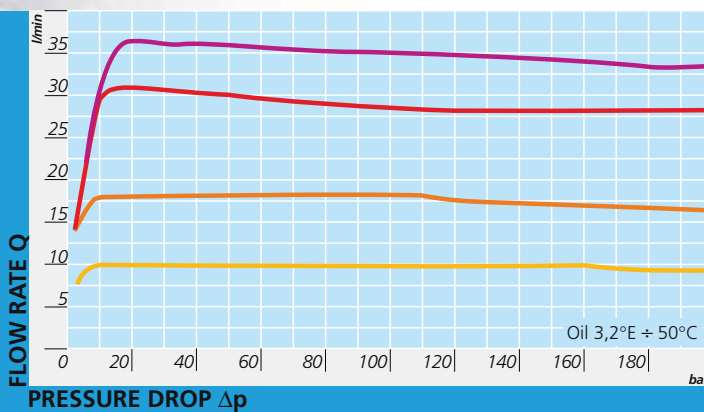


FT 268/2 - UNF

FT 268/2 - 34



FT 268/2 - 78



TECHNICAL DATA

TYPE	FLOW SECTION CM ²	MAX. WORKING PRESSURE BAR	MIN. BURSTING PRES- SURE BAR	WORKING TEMPERATURE °C	FILTRATION GRADE μM ABSOLUTE
34	0,10	320	1300	-20°/+100°	25
78	320	320	1300	-20°/+100°	25

Technical drawing of a mechanical part, likely a shaft or housing, showing dimensions and tolerances. The drawing includes a cross-section view and a side view. Key dimensions and tolerances are labeled:

- Dimensions:** ϕL , ϕA , ϕB , ϕC , ϕH , M , N , P , Q , S , T , D , E , F , G .
- Tolerances:** $\phi 0.025$ A, $\phi 0.10$ A, 0.05 A.
- Surface Finish:** 1.6 , 1.6 , 1.6 , 1.6 , 1.6 .
- Geometric Features:** R OR R , 45° , 1.6 , 1.6 , 1.6 .
- Material:** $\phi 0.025$ A, $\phi 0.10$ A, 0.05 A.

DRAWING OF CAVITY MACHINE FOR CARTRIDGE MOUNTED VALVES



FT 265/2 - 266/2 - 266/5 - 266/6 - 268/2

CONICAL SEATING FOR OR FT 265/2 - FT 266/2 FT 266/5 - FT266/6 - 268/2

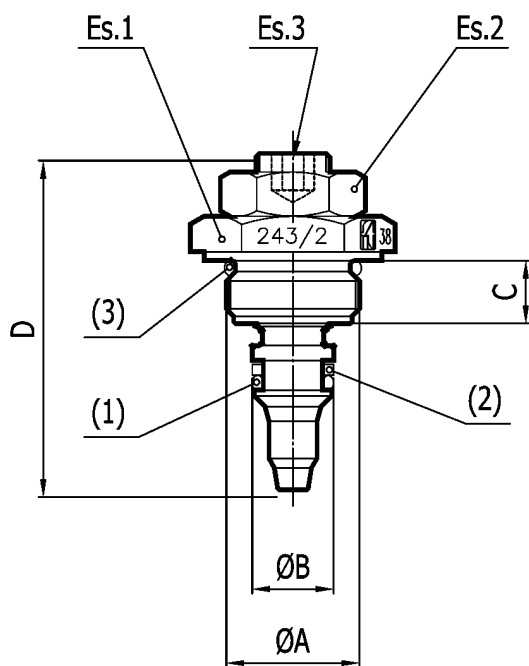
TYPE	ØA	ØB	^C UNI 4534	D	E	F	G	ØH	ØL
34	32 $\pm$ 0,4	20,65 $\pm$ 0,1	3/4"-16UNF-2B	2,75	9,5	18,9	28,6	11,7	12,7 $^{+0,05}_{-0}$
78	32 $\pm$ 0,4	24 $\pm$ 0,1	7/8"-14UNF-2B	2,75	12,35	24,25	31,85	15	15,875 $^{+0,05}_{-0}$

CONICAL SEATING FOR OR FT 265/2 - FT 266/2 FT 266/5 - FT266/6 - 268/2

TYPE	M	N	P	Q	R	S	T	α°	OR
34	0,5	14,3	19,05 $\pm$ 0,13	1,53 $\pm$ 0,08	0,1 $^{+0,15}_{-0}$	29 $\pm$ 0,4	29,8	70°	2068
78	0,5	15,75	24,45 $\pm$ 0,1	1,4 $\pm$ 0,1	0,1 $^{+0,15}_{-0}$	33,75 $\pm$ 0,4	34,5	60°	3075



FT 243/2



MATERIALS

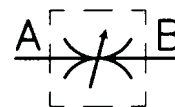
BODY	ETG 100
NEEDLE	35SMNP810 - AISI 303
OR	NITRILE
NUT	35SMNP810
BK	PTFE

EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL
STEEL	FT 243/2	34	V
STAINLESS STEEL	FT 2243/2	34	-

DIMENSIONS

TYPE	ØA	ØB	C	D	Es.1	Es.2	Es.3	(1) OR	(2) BK	(3) OR	ØF	ØG
14	M17x1	10	8.5	44.5	22	17	4	106	106	2056	26	17.5
38	M18x1	11	8.5	45.5	24	17	5	2031	2031	2062	28	18.5
12	M22x1.5	14	13.5	66.5	27	19	7	2043	2043	2075	33	22.5
34	M27x1.5	18	18	82	32	22	9	2056	2056	3093	35	28



DOUBLE-ACTING BRAKING VALVES

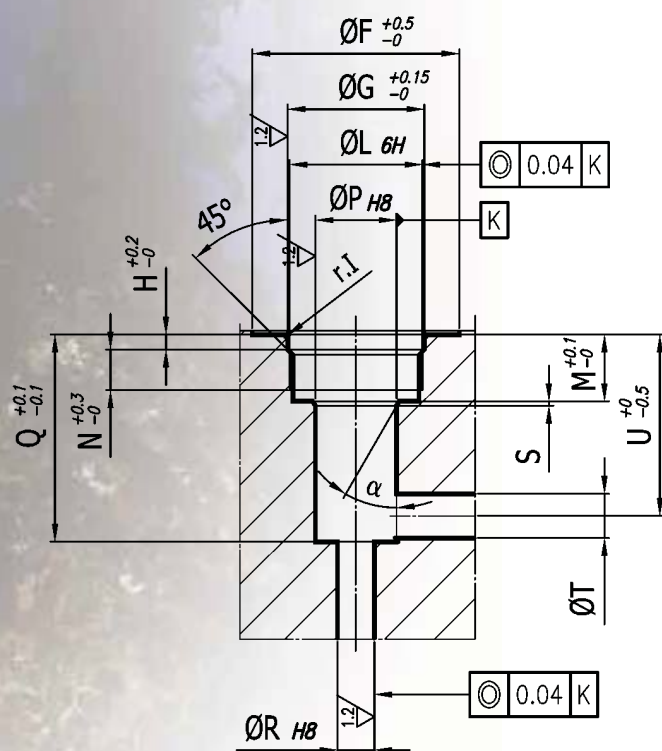
They are composed of a needle throttling which allows a very sensitive control. They can be used in the assembling in manifolds and integrated blocks and are also used as cylinder braking valves.

Recommended filtration: 60 micron or inferior.
Max. working pressure: 300 bar

On request
Version in AISI 316 code FT 2243/2



FT 243/2

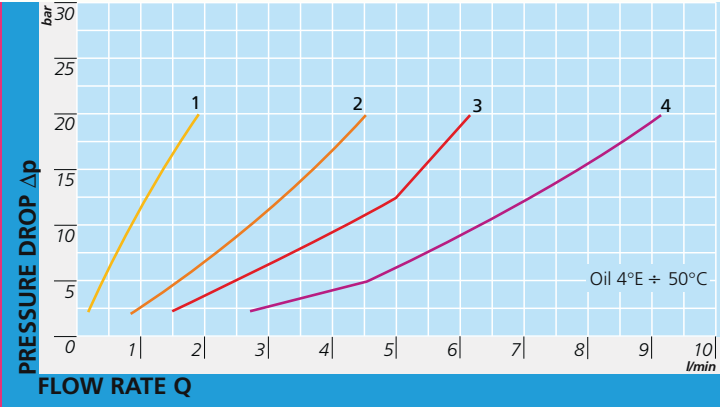


DIMENSIONS

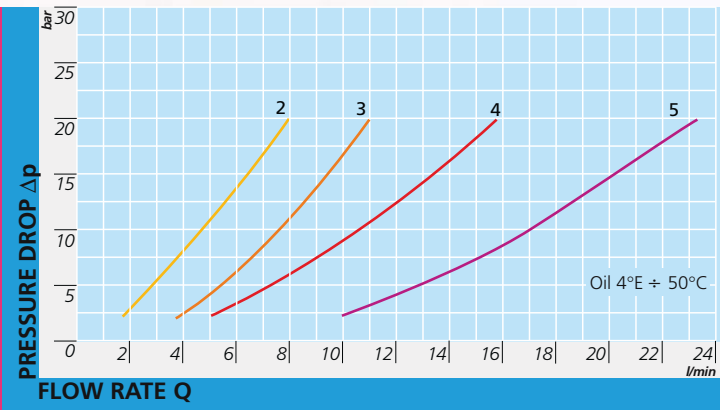
TYPE	H	ØL	M	N	ØP	Q	ØR	S	ØT	U	R.I	α°
14	2	M17x1	9	5.5	10	28	4	0.6	4.5	25	0.3	30°
38	2	M18x1	9	5	11	28	5	0.6	6	24.5	0.3	30°
12	2.5	M22x1.5	15	10	14	40.5	8	1	8	36	0.3	20°
34	3.5	M27x1.5	21	15	18	54.5	10	1.5	10	48.5	0.5	20°



FT 243/2 - 14

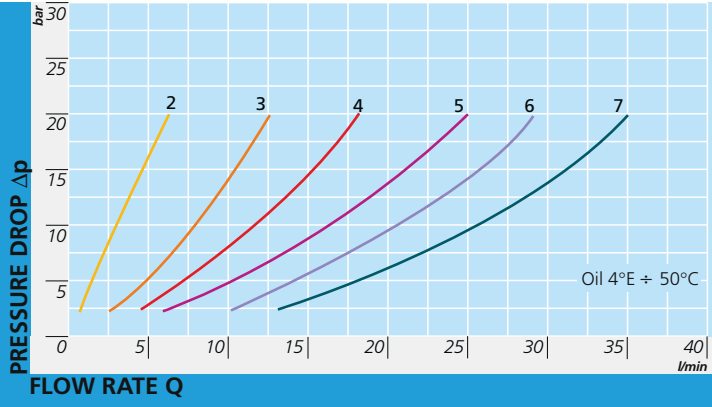


FT 243/2 - 38

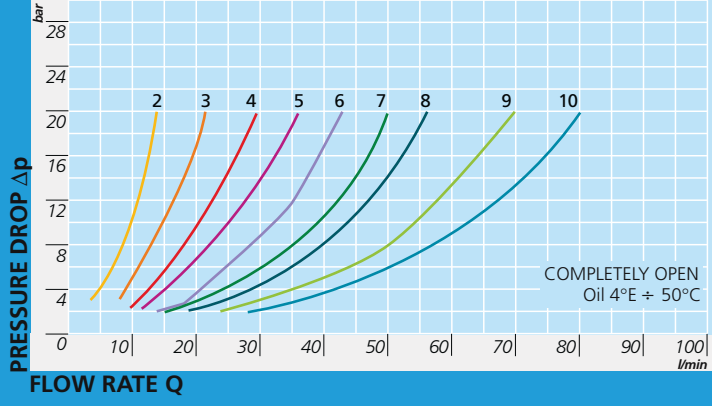


FLOW RATE CURVES

FT 243/2 - 12



FT 243/2 - 34



FT 243/2

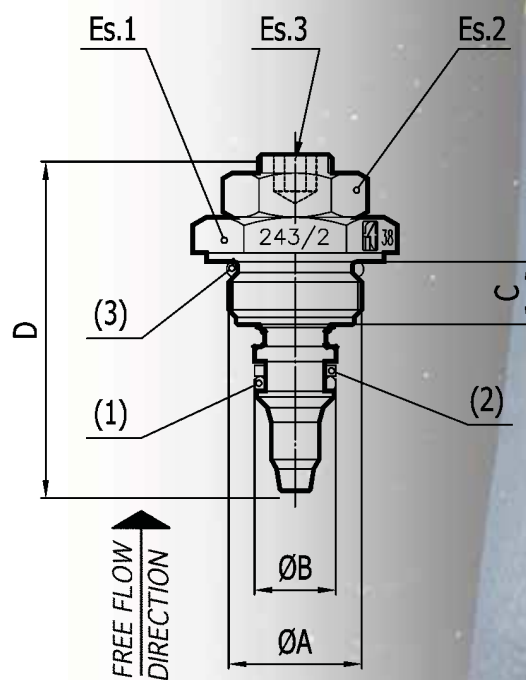
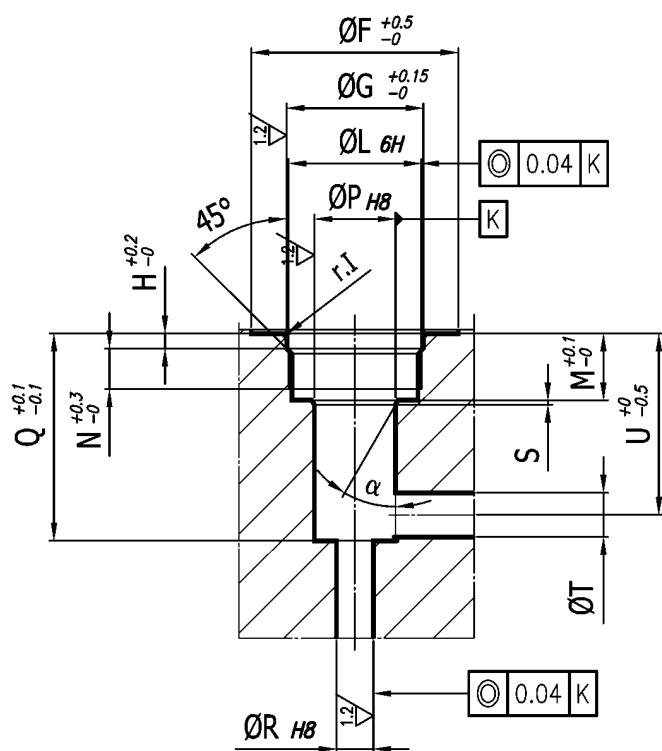


MATERIALS

BODY	ETG 100
NEEDLE	35SMNP810 - AISI 303
OR	NITRILE
NUT	35SMNP810
BK	PTFE

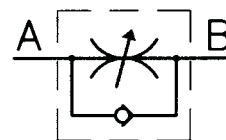
EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL
STEEL	FT 243/5	34	V
STAINLESS STEEL	FT 2243/5	34	-



DIMENSIONS

TYPE	ØA	ØB	C	D	Es.1	Es.2	Es.3	(1) OR	(2) BK	(3) OR	ØF	ØG
14	M17x1	10	8.5	44.5	22	17	4	106	106	2056	26	17.5
38	M18x1	11	8.5	45.5	24	17	5	2031	2031	2062	28	18.5
12	M22x1.5	14	13.5	66.5	27	19	7	2043	2043	2075	33	22.5
34	M27x1.5	18	18	82	32	22	9	2056	2056	3093	35	28



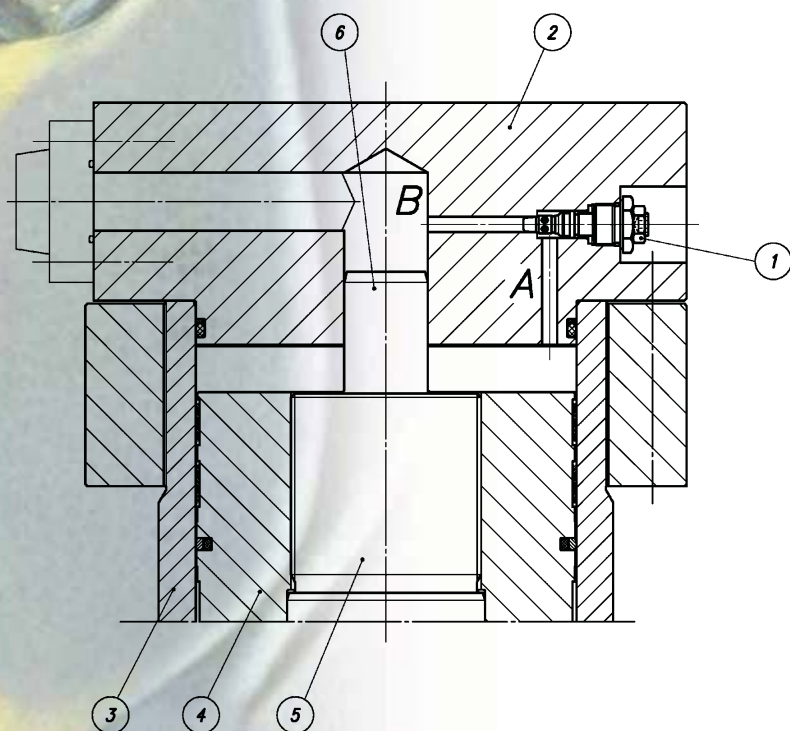
SINGLE-ACTING BRAKING VALVES

They are composed of a needle throttling, inside which there is a ball single-acting valve. They can be used in the assembling in manifolds and integrated blocks and are also used as cylinder braking valves.

Recommended filtration: 60 micron or inferior.
Max. working pressure: 300 bar



FT 243/5



DESCRIPTION

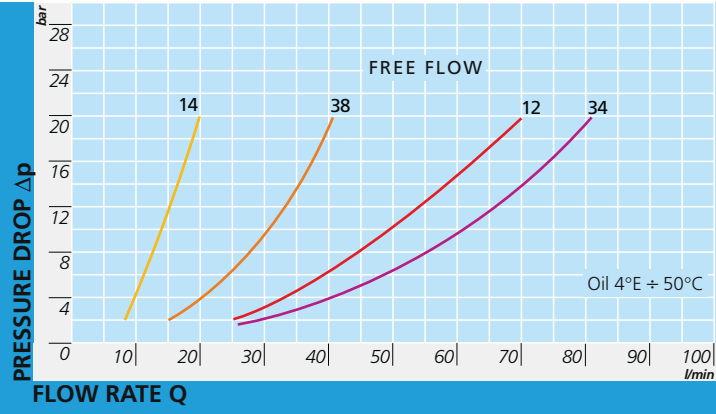
1	VALVE FT 243/5
2	CYLINDER HEAD
3	BARREL
4	PISTON
5	STEM
6	PINK OF BRAKE

DIMENSIONS

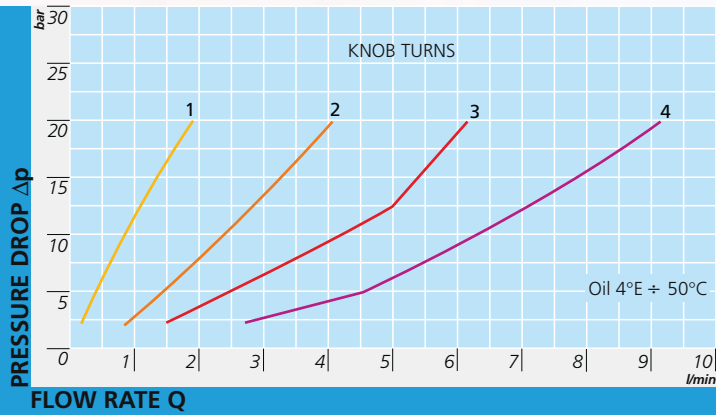
TYPE	H	ØL	M	N	ØP	Q	ØR	S	ØT	U	R.I	α°
14	2	M17x1	9	5.5	10	28	4	0.6	4.5	25	0.3	30°
38	2	M18x1	9	5	11	28	5	0.6	6	24.5	0.3	30°
12	2.5	M22x1.5	15	10	14	40.5	8	1	8	36	0.3	20°
34	3.5	M27x1.5	21	15	18	54.5	10	1.5	10	48.5	0.5	20°



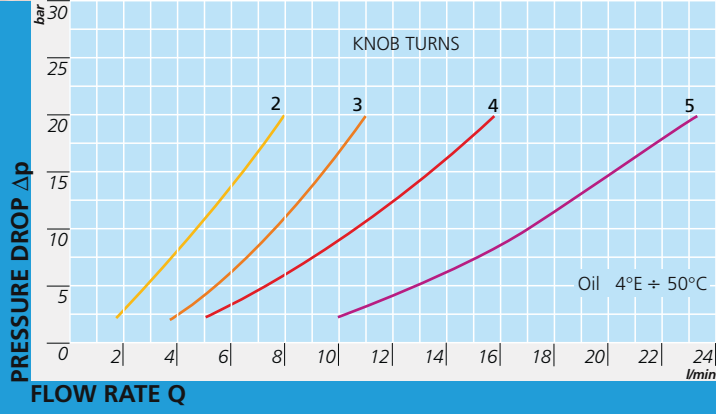
FT 243/5



FT 243/5 - 14



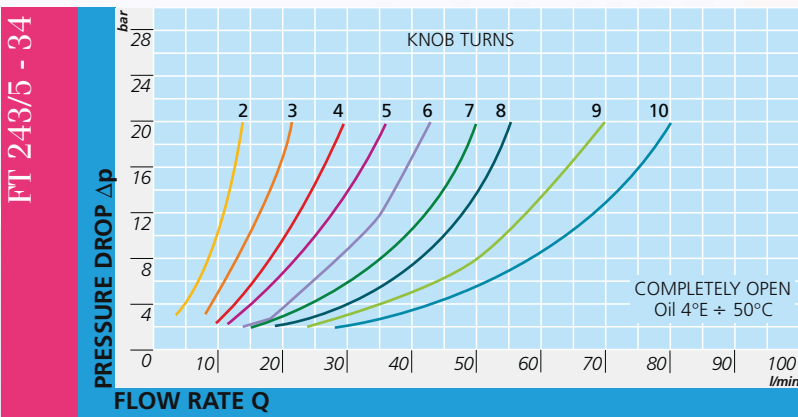
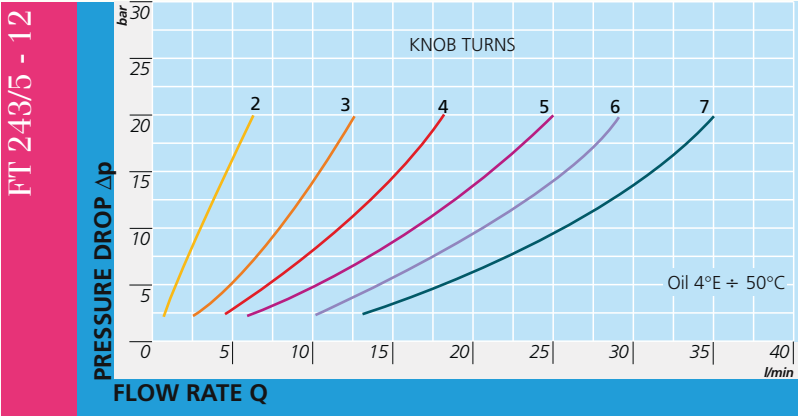
FT 243/5 - 38



FLOW RATE CURVES



FT 243/5





FT 243/5 - S

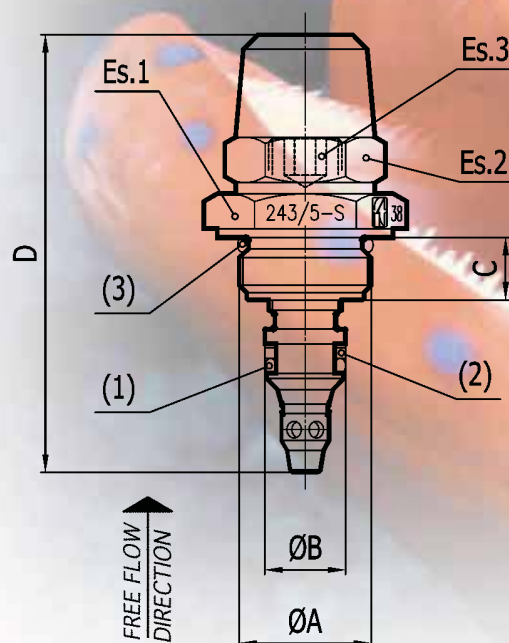
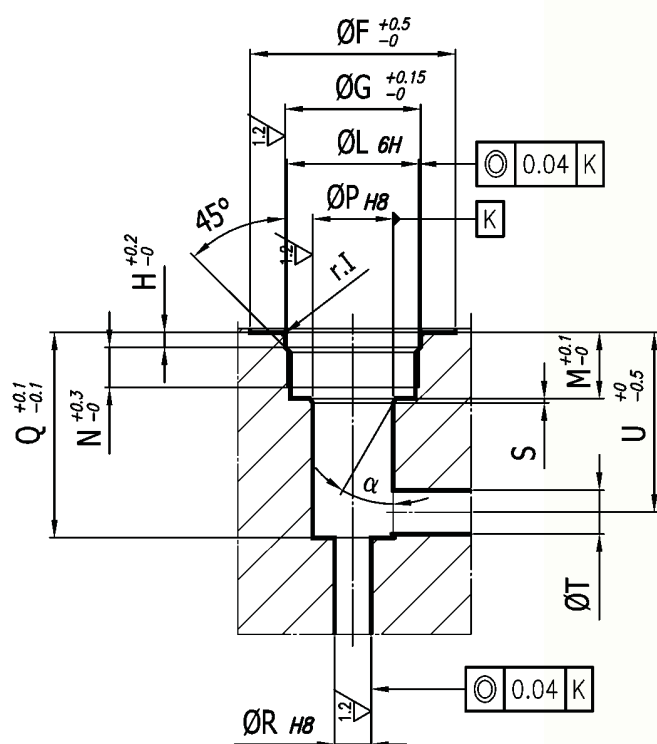


MATERIALS

BODY	ETG 100
NEEDLE	35SMNP810 - AISI 303
OR	NITRILE
NUT	35SMNP810
BK	PTFE

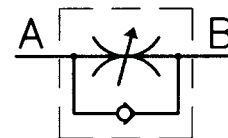
EXAMPLE FOR ORDERING

	CODE	TYPE	VITON SEAL
STEEL	FT 243/5-S	34	V
STAINLESS STEEL	FT 2243/5-S	34	-



DIMENSIONS

TYPE	A	ØB	C	D	Es.1	Es.2	Es.3	(1) OR	(2) BK	(3) OR	ØF	ØG	H
14	M17x1	10	8.5	59	22	17	4	106	106	2056	26	17.5	2
38	M18x1	11	8.5	59	24	19	5	2031	2031	2062	28	18.5	2
12	M22x1.5	14	13.5	87	27	22	7	2043	2043	2075	33	22.5	2.5
34	M27x1.5	18	18	106	32	27	9	2056	2056	3093	35	28	3.5



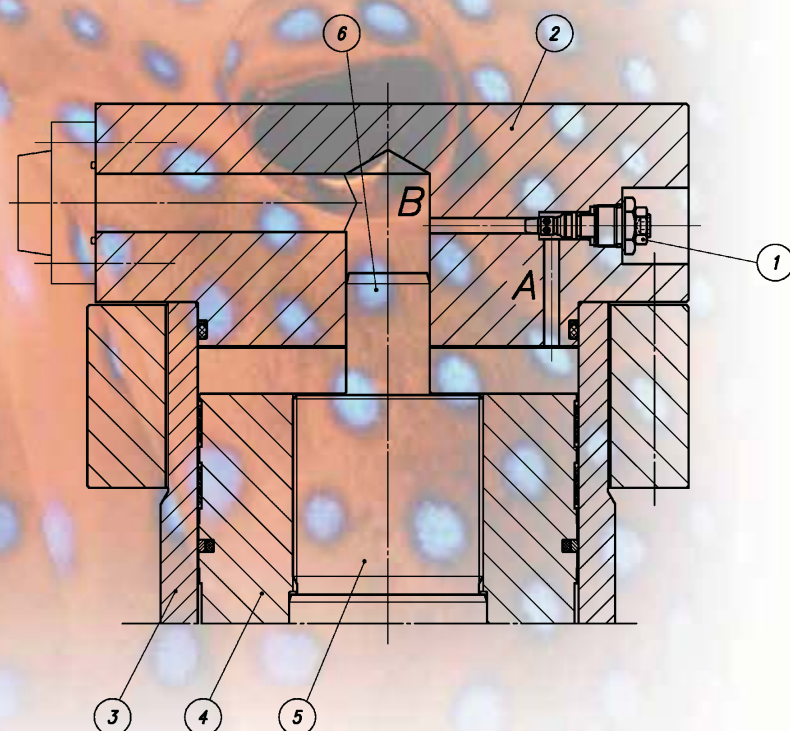
SINGLE-ACTING BRAKING VALVES BLEED-AIR

They are composed of a needle throttling, inside which there is a ball single-acting valve. They can be used in the assembling in manifolds and integrated blocks and are also used as cylinder braking valves. This kind of valve can be used also as air breather. By removing the cap nut it is possible to unscrew the needle and uncover the coaxial passage which allows the breather of the underlying chamber.

Recommended filtration: 60 micron or inferior.
Max. working pressure: 300 bar



FT 243/5-S



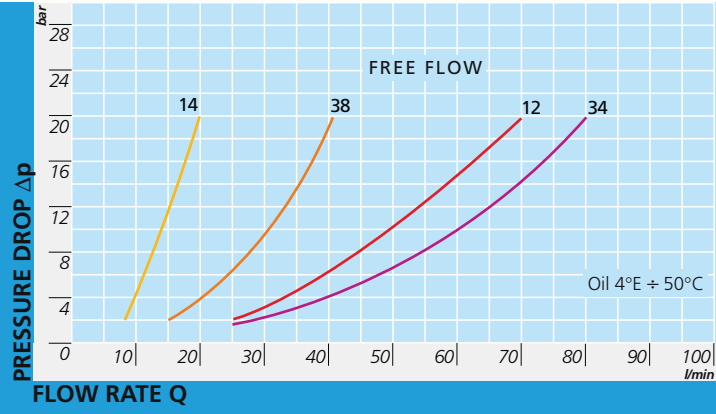
DESCRIPTION	
1	VALVE FT 243/5-S
2	CYLINDER HEAD
3	BARREL
4	PISTON
5	STEM
6	PIN OF BRAKE

DIMENSIONS

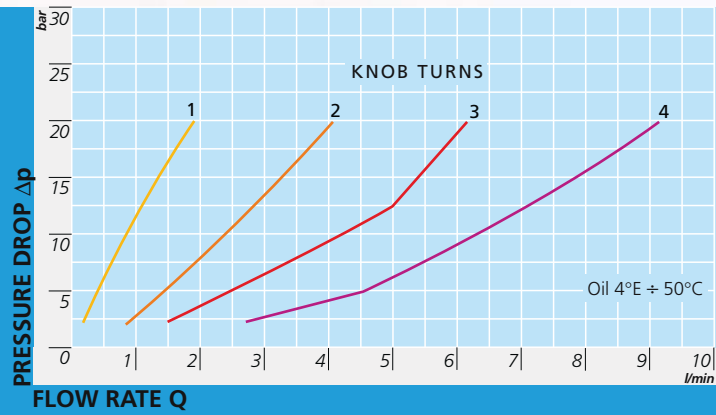
TYPE	ØL	M	N	ØP	Q	ØR	S	ØT	U	R.I	α°
14	M17x1	9	5.5	10	28	4	0.6	4.5	25	0.3	30°
38	M18x1	9	5	11	28	5	0.6	6	24.5	0.3	30°
12	M22x1.5	15	10	14	40.5	8	1	8	36	0.3	20°
34	M27x1.5	21	15	18	54.5	10	1.5	10	48.5	0.5	20°



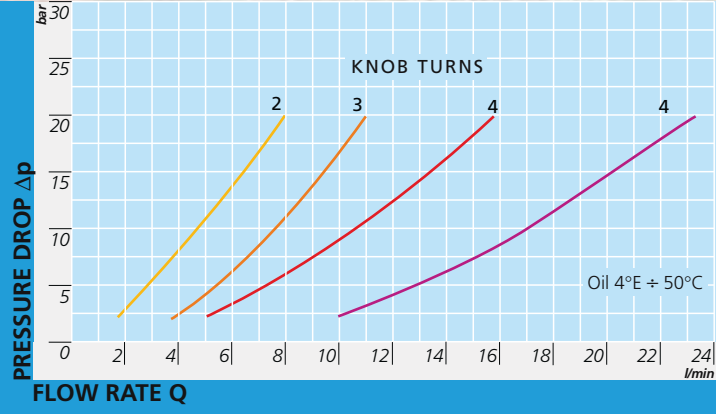
FT 243/5 - S



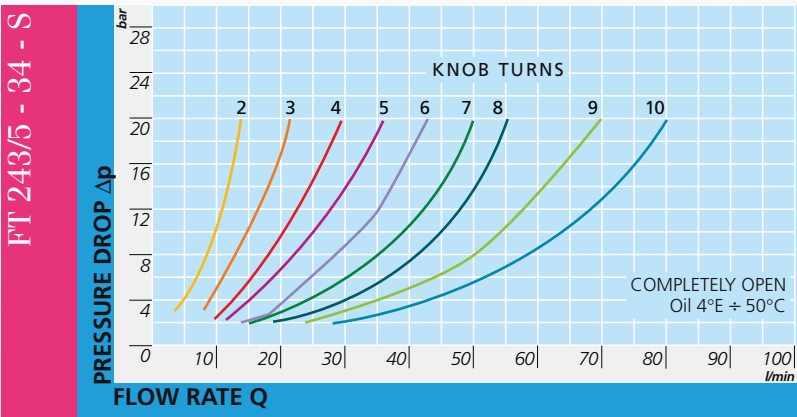
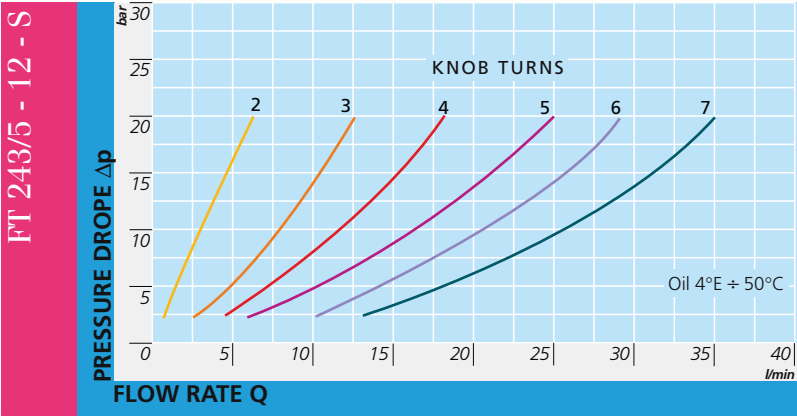
FT 243/5 - 14 - S



FT 243/5 - 38 - S



FLOW RATE CURVES



FT 243/5-S