

piston valves



**The ultimate Technology
for fluid control**

ISO 9001 Certified Quality System

AZIENDA CON SISTEMA QUALITÀ
CERTIFICATO DA DNV
=UNI EN ISO 9001/2000=



**The ultimate Technology
for fluid control**

m&m international

spirax
/sarco Engineering Group

means:

- Working with a staff of qualified professionals
- Enjoying the benefits of the most advanced technological research
- Quality at competitive price
- Warranty of a company conforming to the rigorous ISO9001/2000 requirements
- Reliability of a 30-year experience on international markets
- To partner with a company belonging to a multinational group

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PRODUCT INDEX

BRONZE BODY / BRASS BONNET

actuator Ø 45



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actuator Ø 63/90



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manual angle seat valve



G 1/2" ÷ 2"	CMG2050TW00 ÷ CMG2100TJ00	PAGE 9
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STAINLESS STEEL AISI316L

actuator Ø 45



Ø 45	Normally Closed	PG205CTW00 ÷ PG206CTX00	PAGE 10
	Normally Open	RPG205CTW00 ÷ RPG206CTX00	
	Bidirectional N.C.	BPG205CTW00 ÷ BPG206CTX00	
	Double Acting	DPG205CTW00 ÷ DPG206CTX00	

actuator Ø 63/90



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Ø 63	Double Acting	DPG205STW00 ÷ DPG210STJ00	PAGE 14

manual angle seat valve



G 1/2" ÷ 2"	MG2050TW00 ÷ MG2100TJ00	PAGE 15
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OPTIONAL WELD ENDS FOR S.S. PISTON VALVES

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FLANGE CONNECTIONS

actuator Ø 63/90



Ø 63 Ø 90	Normally closed	PD205STW00 ÷ PD210STJ00
		PD207LTY00 ÷ PD210LTJ00
Ø 63 Ø 90	Normally open	RPD205STW00 ÷ RPD210STJ00
		RPD207LTY00 ÷ RPD210LTJ00
Ø 63 Ø 90	Bidirectional	BPD205STW00 ÷ BPD210STJ00
		BPD207LTY00 ÷ BPD210LTJ00

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CLAMP CONNECTIONS

actuator Ø 45



Ø 45	Normally closed	PC203CTW00 ÷ PC206CTX00
	Normally open	RPC203CTW00 ÷ RPC206CTX00
	Bidirectional	BPC203CTW00 ÷ RPC206CTW00

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actuator Ø 63/90



Ø 63 Ø 90	Normally closed	PC203STW00 ÷ PC210STJ00
		PC207LTY00 ÷ PC210LTJ00
Ø 63 Ø 90	Normally open	RPC203STW00 ÷ RPC210STJ00
		RPC207LTY00 ÷ RPC210LTJ00
Ø 63 Ø 90	Bidirectional	BPC203STW00 ÷ BPC210STJ00
		BPC207LTY00 ÷ BPC210LTJ00

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HIGH TEMPERATURE VERSION

actuator Ø 63/90



Ø 63 Ø 90	Normally closed	PG205STW0H ÷ PG207STY0H
		PG208LTZ0H ÷ PG210LTJ0H
Ø 63 Ø 90	Bidirectional	BPG205STW0H ÷ BPG207STY0H
		BPG208LTZ0H ÷ BPG210LTJ0H

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OPTIONS



FLOW REGULATOR



TRAVEL SWICHT



MANUAL OVERRIDE



TRAVEL SWITCH KIT
page 22-23



SWITCH TYPE A



SWITCH TYPE B

PILOT SOLENOID VALVES



B356 / B326 / D326
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N326CVE EEX. PROOF.
page 25

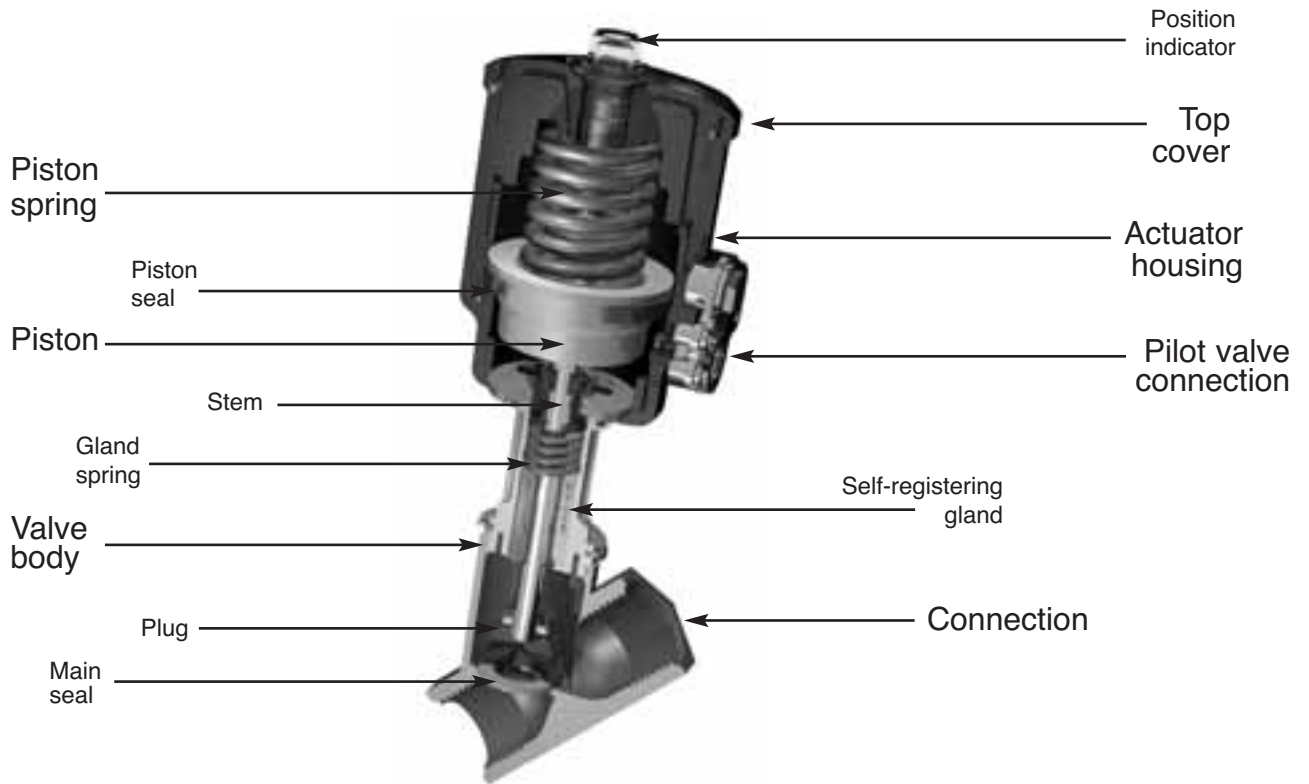
SELECTION CHARTS

BRONZE
page 28-30

STAINLESS STEEL
page 31-33

M&M INTERNATIONAL PISTON VALVES

Scheme of an M&M International piston valve components:



Benefits of M&M INTERNATIONAL PISTON VALVES

Standard versions with high performing components

Standard seal materials as Viton* and Teflon* in contact with process fluid

Bidirectional version

Wide choice of connections

Actuator orientability at 360°

Red position indicator

Self-registering gland and chevron packing

Housing with angle seat design

s.s. valves with universal design

Universal mounting M&M solenoid pilot valves

Actuator with built-in exhaust filter

- Covering a wide range of industrial applications with reduced stock
- max. compatibility with fluids resistance at high temperatures
- Waterhammer-free installation
- Thread, welding, flange, clamp
- Easy and quick installation
- Immediate visibility of the valve position
- Smooth stem movement for longer durability
- High flow rate, low pressure drop
- Suitable for vacuum applications
- Max. flexibility during installation
- Higher reliability

* Dupont Trademark

2/2 WAY PISTON VALVE, G 1/2" ÷ 1"; BRONZE

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam ⁽¹⁾
Media temperature: -10°C ... +180°C
Ambient temperature: -10°C ... +60°C
Pilot media: air, inert gases, water
Body material: bronze (CC491K EN 1982 : 2000)
Bonnet material: brass (CW617N EN 12165 : 1999)
Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)
Seal material: PTFE
Position indicator as standard

TYPE: COMPACT 45



BENEFITS

Waterhammer-free design for BCG type (2 → 1)
Actuator housing rotation 360°
Design suitable for vacuum applications up to 10 ⁻² mbar

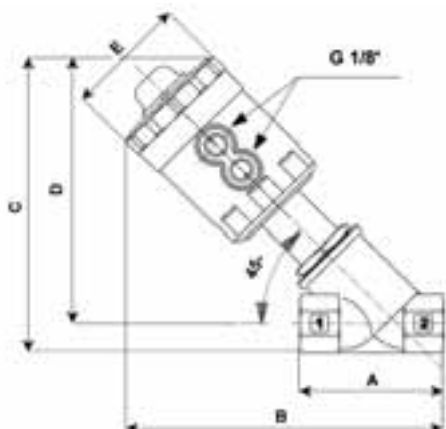
OPTIONS

NPT connection (ex. code CN205CTW00)

SELECTION TABLE

VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Function
				min (bar)	max (bar)		min (bar)	max (bar)	
Code	(ISO 228 G)	(mm)	(l/min)						(mm)
CG205CTW00	1/2"	15	98	0	16	1 → 2	3.8	10	normally closed
CG206CTX00	3/4"	20	164	0	16	1 → 2	5.8	10	normally closed
CG207CTY00	1"	25	260	0	16	1 → 2	6.5	10	normally closed
BCG205CTW00	1/2"	15	98	0	16 / 16	1→2 / 2→1	6.2 / 5	10	normally closed
BCG206CTX00	3/4"	20	164	0	16 / 7	1→2 / 2→1	8.7 / 5	10	normally closed
BCG207CTY00	1"	25	260	0	16 / 5	1→2 / 2→1	9.5 / 5	10	normally closed
RCG205CTW00	1/2"	15	98	0	16	2 → 1	4	10	normally open
RCG206CTX00	3/4"	20	164	0	16	2 → 1	6.2	10	normally open
RCG207CTY00	1"	25	260	0	16	2 → 1	8.8	10	normally open
DCG205CTW00	1/2"	15	98	0	16 / 16	1→2 / 2→1	3	10	double acting
DCG206CTX00	3/4"	20	164	0	16 / 16	1→2 / 2→1	5	10	double acting
DCG207CTY00	1"	25	260	0	16 / 16	1→2 / 2→1	8.5	10	double acting

(1) Steam: Max. working pressure 10 bar (9 barg); - (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts



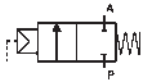
VERSION

	NC normally closed, over seat flow (1 → 2)
	NC normally closed, bidirectional (1 ↔ 2)
	NO normally open, under seat flow (2 → 1)
	DOUBLE ACTING (1 ↔ 2)

DIMENSIONS & WEIGHTS

Connection	Actuator ø	A	B	C	D	E	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	45	65	144	136	123	57	0.8
3/4"	45	75	149	142	126	57	0.9
1"	45	90	168	161	141	57	1.1

2/2 WAY PISTON VALVE, G 1/2" ÷ 2"; BRONZE



**normally closed
flow over seat**

TYPE: REGULAR NC

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam ⁽¹⁾
Media temperature: -10°C ... +180°C
Ambient temperature: -10°C ... +60°C
Pilot media: air, inert gases, water
Body material: bronze (CC491K EN 1982: 2000)
Bonnet material: brass (CW617N EN 12165: 1999)
Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)
Seal material: PTFE
Position indicator as standard

BENEFITS

Actuator housing rotation 360°

OPTIONS

Manual override (ex. code CG205STWM0) see page 22

Stroke regulator (ex. code CG210STJR0) see page 22

Travel switch (ex. code CG208LTZi0) see page 22

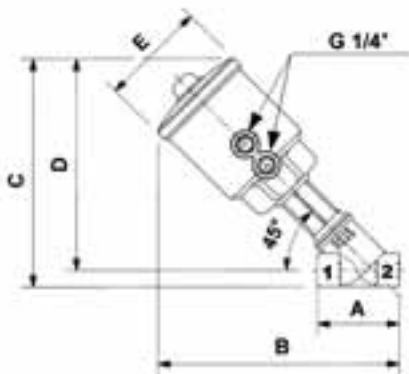
Design for vacuum applications up to 10⁻² mbar (ex. code CG205STW0V)

NPT connection (ex. code CN205STW00)



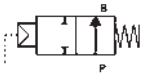
SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Actuator ø
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)	(1→2)	min (bar)	max (bar)	(mm)
	CG205STW00	1/2"	15	98	0	20	over seat	3.7	10	63
CG206STX00	3/4"	20	164	0	20	over seat	4.4	10	63	
CG207STY00	1"	25	260	0	20	over seat	5	10	63	
CG208STZ00	1 1/4"	32	410	0	16	over seat	5.9	10	63	
CG209STK00	1 1/2"	40	700	0	16	over seat	9	10	63	
CG210STJ00	2"	50	950	0	11	over seat	8	10	63	
CG207LTY00	1"	25	260	0	20	over seat	2	8	90	
CG208LTZ00	1 1/4"	32	410	0	16	over seat	3.5	8	90	
CG209LTK00	1 1/2"	40	700	0	16	over seat	4	8	90	
CG210LTJ00	2"	50	950	0	15	over seat	6.5	8	90	

(1) Steam: Max. working pressure 10 bar (9 barg); - (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts;



DIMENSIONS & WEIGHTS	Connection	Actuator ø	A	B	C	D	E	weight
	(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
	1/2"	63	65	192	184	171	85	1.2
	3/4"	63	75	198	192	176	85	1.3
	1"	63	90	212	205	185	85	1.5
	1 1/4"	63	110	225	217	193	85	1.9
	1 1/2"	63	120	230	225	198	85	2.1
	2"	63	150	248	241	207	85	2.9
	1"	90	90	223	216	196	112	2.0
	1 1/4"	90	110	234	227	202	112	2.4
	1 1/2"	90	120	239	235	207	112	2.6
	2"	90	150	257	250	216	112	3.3

2/2 WAY PISTON VALVE, G 1/2" ÷ 2" NORMALLY OPEN; BRONZE



**normally open
flow under seat**

TYPE: REGULAR NO

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam ⁽¹⁾
Media temperature: -10°C ... +180°C
Ambient temperature: -10°C ... +60°C
Pilot media: air, inert gases, water
Body material: bronze (CC491K EN 1982 : 2000)
Bonnet material: brass (CW617N EN 12165 : 1999)
Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)
Seal material: PTFE
Position indicator as standard

BENEFITS

Waterhammer-free design
Actuator housing rotation 360°

OPTIONS

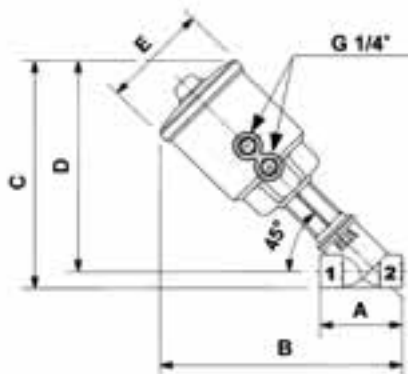
Manual override (ex. code RCG205STWM0) see page 22
Stroke regulator (ex. code RCG210STJR0) see page 22
Travel switch (ex. code RCG208LTZ0) see page 22
Design for vacuum applications up to 10 ⁻² mbar (ex. code RCG205STW0V)
NPT connection (ex. code RCN205STW00)



SELECTION TABLE

VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Actuator ø
				min (bar)	max (bar)		min (bar)	max (bar)	
Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)	(2 → 1)	min (bar)	max (bar)	(mm)
RCG205STW00	1/2"	15	98	0	16	under seat	2.5	10	63
RCG206STX00	3/4"	20	164	0	16	under seat	4.3	10	63
RCG207STY00	1"	25	260	0	16	under seat	5.5	10	63
RCG208STZ00	1 1/4"	32	410	0	16	under seat	6.5	10	63
RCG209STK00	1 1/2"	40	700	0	16	under seat	9	10	63
RCG210STJ00	2"	50	950	0	12	under seat	9.4	10	63
RCG207LTY00	1"	25	260	0	16	under seat	2	8	90
RCG208LTZ00	1 1/4"	32	410	0	16	under seat	4	8	90
RCG209LTK00	1 1/2"	40	700	0	16	under seat	5	8	90
RCG210LTJ00	2"	50	950	0	16	under seat	7	8	90

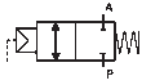
(1) Steam: Max. working pressure 10 bar (9 barg); - (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts;



DIMENSIONS & WEIGHTS

Connection	Actuator ø	A	B	C	D	E	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	63	65	192	184	171	85	1.2
3/4"	63	75	198	192	176	85	1.3
1"	63	90	212	205	185	85	1.5
1 1/4"	63	110	225	217	193	85	1.9
1 1/2"	63	120	230	225	198	85	2.1
2"	63	150	248	241	207	85	2.9
1"	90	90	223	216	196	112	2.0
1 1/4"	90	110	234	227	202	112	2.4
1 1/2"	90	120	239	235	207	112	2.6
2"	90	150	257	250	216	112	3.3

2/2 WAY PISTON VALVE G 1/2" ÷ 2" BIDIRECTIONAL; BRONZE



**normally closed
flow over / under seat**

TYPE: REGULAR BD

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam ⁽¹⁾
Media temperature: -10°C ... +180°C
Ambient temperature: -10°C ... +60°C
Pilot media: air, inert gases, water
Body material: bronze (CC491K EN 1982 : 2000)
Bonnet material: brass (CW617N EN 12165 : 1999)
Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)
Seal material: PTFE
Position indicator as standard

BENEFITS

Waterhammer-free design (with flow direction 2→1)
Actuator housing rotation 360°

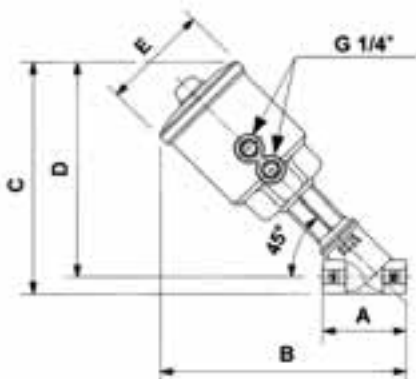
OPTIONS

Manual override (ex. code BCG205STWM0) see page 22
Flow regulator (ex. code BCG210STJR0) see page 22
Travel switch (ex. code BCG208LTZ0) see page 22
Design for vacuum applications up to 10 ⁻² mbar (ex. code BCG205STWOV)
NPT connection (ex. code BCN205STW00)



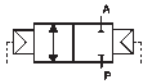
SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Actuator ø
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)		min (bar)	max (bar)	(mm)
	BCG205STW00	1/2"	15	98	0	16	1→2 2→1	5.5 / 3.8	10	63
BCG206STX00	3/4"	20	164	0	16	1→2 2→1	6 / 3.8	10	63	
BCG207STY00	1"	25	260	0	16 / 11	1→2 2→1	6.5 / 3.8	10	63	
BCG208STZ00	1 1/4"	32	410	0	16 / 6	1→2 2→1	6.8 / 3.8	10	63	
BCG209STK00	1 1/2"	40	700	0	12 / 4	1→2 2→1	9 / 3.8	10	63	
BCG210STJ00	2"	50	950	0	8 / 2.5	1→2 2→1	9 / 3.8	10	63	
BCG207LTY00	1"	25	260	0	16 / 14	1→2 2→1	4 / 3.3	8	90	
BCG208LTZ00	1 1/4"	32	410	0	16 / 12	1→2 2→1	5 / 3.3	8	90	
BCG209LTK00	1 1/2"	40	700	0	16 / 8	1→2 2→1	6 / 3.3	8	90	
BCG210LTJ00	2"	50	950	0	14 / 5	1→2 2→1	8 / 3.3	8	90	

(1) Steam: Max. working pressure 10 bar (9 barg); - (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts;



DIMENSIONS & WEIGHTS	Connection	Actuator ø	A	B	C	D	E	weight
	(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
	1/2"	63	65	192	184	171	85	1.2
	3/4"	63	75	198	192	176	85	1.3
	1"	63	90	212	205	185	85	1.5
	1 1/4"	63	110	225	217	193	85	1.9
	1 1/2"	63	120	230	225	198	85	2.1
	2"	63	150	248	241	207	85	2.9
	1"	90	90	223	216	196	112	2.0
	1 1/4"	90	110	234	227	202	112	2.4
	1 1/2"	90	120	239	235	207	112	2.6
	2"	90	150	257	250	216	112	3.3

2/2 WAY PISTON VALVE, G 1/2" ÷ 2" DOUBLE ACTING; BRONZE



**double acting
flow over / under seat**

TYPE: REGULAR DA

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam ⁽¹⁾
Media temperature: -10°C ... +180°C
Ambient temperature: -10°C ... +60°C
Pilot media: air, inert gases, water
Body material: bronze (CC491K EN 1982 : 2000)
Bonnet material: brass (CW617N EN 12165 : 1999)
Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)
Seal material: PTFE
Position indicator as standard

BENEFITS

Waterhammer-free design (with flow direction 2→1)
Actuator housing rotation 360°

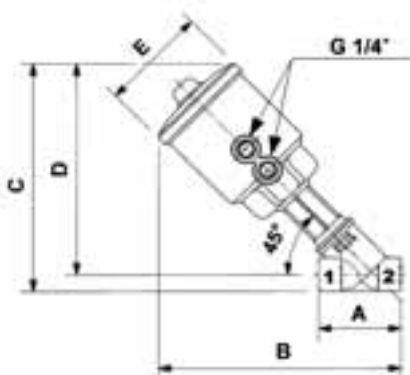
OPTIONS

Manual override (ex. code DCG205STWM0) see page 22
Stroke regulator (ex. code DCG210STJR0) see page 22
Travel switch (ex. code DCG208LTZ10) see page 22
Design for vacuum applications up to 10⁻²mbar (ex. code DCG205STW0V)
NPT connection (ex. code DCN205STW00)



SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Actuator ø
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)		min (bar)	max (bar)	(mm)
	DCG205STW00	1/2"	15	98	0	16	1 ↔ 2	1.8	2	63
DCG206STX00	3/4"	20	164	0	16	1 ↔ 2	2	3.8	63	
DCG207STY00	1"	25	260	0	16	1 ↔ 2	3	5	63	
DCG208STZ00	1 1/4"	32	410	0	16	1 ↔ 2	4.5	6	63	
DCG209STK00	1 1/2"	40	700	0	16	1 ↔ 2	6.5	7	63	
DCG210STJ00	2"	50	950	0	12	1 ↔ 2	7	8	63	

(1) Steam: Max. working pressure 10 bar (9 barg); - (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts;



DIMENSIONS & WEIGHTS

Connection	Actuator ø	A	B	C	D	E	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	63	65	192	184	171	85	1.2
3/4"	63	75	198	192	176	85	1.3
1"	63	90	212	205	185	85	1.5
1 1/4"	63	110	225	217	193	85	1.9
1 1/2"	63	120	230	225	198	85	2.1
2"	63	150	248	241	207	85	2.9

MANUAL ANGLE SEAT VALVE, G 1/2" ÷ 2"; BRONZE

flow over / under seat

TYPE: CMG

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam⁽¹⁾

Media temperature: -10°C ... +180°C

Ambient temperature: -10°C ... +60°C

Body material: (CC491K EN 1982: 2000)

Bonnet material: (CW617N EN 12165: 1999)

Seal material: PTFE

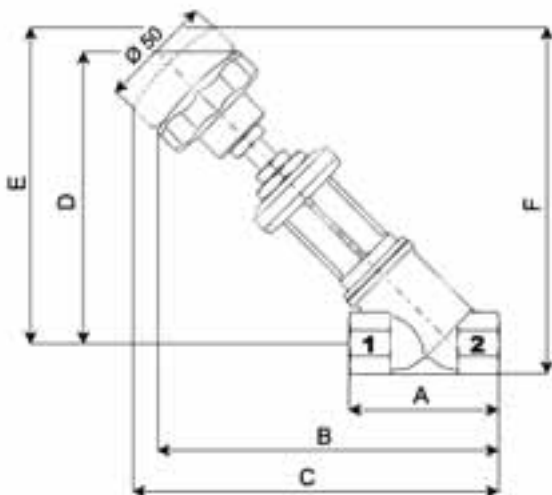
OPTIONS

NPT connection (ex. code CMN2050TW00)



SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)	
	CMG2050TW00	1/2"	15	98	0	25	1 ↔ 2
	CMG2060TX00	3/4"	20	164	0	25	1 ↔ 2
	CMG2070TY00	1"	25	260	0	25	1 ↔ 2
	CMG2080TZ00	1 1/4"	32	410	0	25	1 ↔ 2
	CMG2090TK00	1 1/2"	40	700	0	25	1 ↔ 2
	CMG2100TJ00	2"	50	950	0	16	1 ↔ 2

(1) Steam: Max. working pressure 10 bar (9 barg);



DIMENSIONS & WEIGHTS

Connection	A	B	C	D	E	F	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	65	142	150	121	128	142	0.75
3/4"	75	148	155	126	133	150	0.80
1"	90	163	172	135	145	165	1.20
1 1/4"	110	175	188	143	156	181	1.80
1 1/2"	120	180	193	148	161	189	2.10
2"	150	198	212	157	170	205	3.10

2/2 WAY PISTON VALVE G 1/2" ÷ 3/4"; STAINLESS STEEL

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam ⁽¹⁾
Media temperature: -10°C ... +180°C
Ambient temperature: -10°C ... +60°C
Pilot media: air, inert gases, water
Body material: cast AISI 316L (ASME SA351/351M GRADE CF3M)
Bonnet material: cast AISI 316L (ASME SA351/351M GRADE CF3M)
Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)
Seal material: PTFE
Position indicator as standard

TYPE: COMPACT 45



BENEFITS

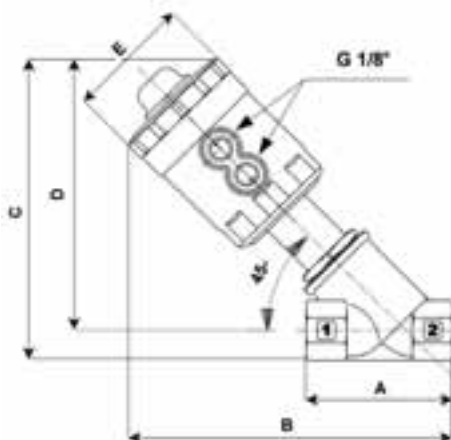
Waterhammer-free design for BPG type (2 → 1)
Actuator housing rotation 360°
Design suitable for vacuum applications up to 10 ⁻² mbar

OPTIONS

NPT connection (ex. code PN205CTW00)
Weld ends see page 16

SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Function
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)		min (bar)	max (bar)	(mm)
	PG205CTW00	1/2"	15	98	0	16	1 → 2	3.8	10	normally open
PG206CTX00	3/4"	20	164	0	16	1 → 2	5.8	10	normally open	
BPG205CTW00	1/2"	15	98	0	16 / 16	1 → 2 2 → 1	6.2 / 5	10	normally closed	
BPG206CTX00	3/4"	20	164	0	16 / 7	1 → 2 2 → 1	8.7 / 5	10	normally closed	
RPG205CTW00	1/2"	15	98	0	16	2 → 1	4	10	normally open	
RPG206CTX00	3/4"	20	164	0	16	2 → 1	6.2	10	normally open	
DPG205CTW00	1/2"	15	98	0	16 / 16	1 → 2 2 → 1	3	10	double acting	
DPG206CTX00	3/4"	20	164	0	16 / 16	1 → 2 2 → 1	5	10	double acting	

(1) Steam: Max. working pressure 10 bar (9 barg); - (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts;



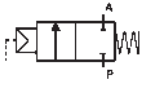
VERSIONS

	NC normally close, over seat flow (1 → 2)
	NC normally closed, bidirectional (1 ↔ 2)
	NO normally open, under seat flow (2 → 1)
	DOUBLE ACTING, (1 ↔ 2)

DIMENSIONS & WEIGHTS

Connection	Actuator ø	A	B	C	D	E	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	45	65	144	136	123	57	0.8
3/4"	45	75	155	142	126	57	0.9

2/2 WAY PISTON VALVE G 1/2" ÷ 2"; STAINLESS STEEL



**normally closed
flow over seat**

TYPE: REGULAR NC

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam⁽¹⁾

Media temperature: -10°C ... +180°C

Ambient temperature: -10°C ... +60°C

Pilot media: air, inert gases, water

Body material: cast AISI 316L (ASME SA351/351M GRADE CF3M)

Bonnet material: cast AISI 316L (ASME SA351/351M GRADE CF3M)

Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)

Seal material: PTFE

Position indicator as standard

Valves DN32-DN50 complying with 97/23 EC directive category I

BENEFITS

Actuator housing rotation 360°

Design suitable for vacuum applications up to 10⁻² mbar

OPTIONS

Manual override (ex. code PG205STWM0) see page 22

Flow regulator (ex. code PG210STJR0) see page 22

Travel switch (ex. code PG208LTZi0) see page 22

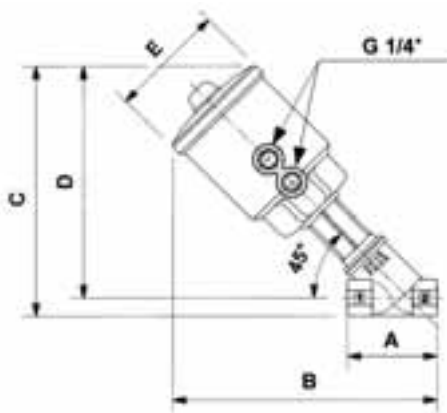
NPT connection (ex. code PN205STW00)

Weld ends see page 16



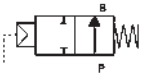
SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Actuator ø
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)	(1 → 2)	min (bar)	max (bar)	(mm)
	PG205STW00	1/2"	15	98	0	20	over seat	3.7	10	63
PG206STX00	3/4"	20	164	0	20	over seat	4.4	10	63	
PG207STY00	1"	25	260	0	20	over seat	5	10	63	
PG208STZ00	1 1/4"	32	410	0	16	over seat	5.9	10	63	
PG209STK00	1 1/2"	40	700	0	16	over seat	9	10	63	
PG210STJ00	2"	50	950	0	11	over seat	8	10	63	
PG207LTY00	1"	25	260	0	20	over seat	2	8	90	
PG208LTZ00	1 1/4"	32	410	0	16	over seat	3.5	8	90	
PG209LTK00	1 1/2"	40	700	0	16	over seat	4	8	90	
PG210LTJ00	2"	50	950	0	15	over seat	6.5	8	90	

(1) Steam: Max. working pressure 10 bar (9 barg); - (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts;



DIMENSIONS & WEIGHTS	Connection	Actuator ø	A	B	C	D	E	weight
	(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
	1/2"	63	65	192	184	171	85	1.2
	3/4"	63	75	198	192	176	85	1.3
	1"	63	90	212	205	185	85	1.5
	1 1/4"	63	110	225	217	193	85	1.9
	1 1/2"	63	120	230	225	198	85	2.1
	2"	63	150	248	241	207	85	2.9
	1"	90	90	223	216	196	112	2.0
	1 1/4"	90	110	234	227	202	112	2.4
	1 1/2"	90	120	239	235	207	112	2.6
	2"	90	150	257	250	216	112	3.3

2/2 WAY PISTON VALVE G 1/2" ÷ 2" NORMALLY OPEN; STAINLESS STEEL



**normally open
flow under seat**

TYPE: REGULAR NO

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam⁽¹⁾
 Media temperature: -10°C ... +180°C
 Ambient temperature: -10°C ... +60°C
 Pilot media: air, inert gases, water
 Body material: cast AISI 316L (ASME SA351/351M GRADE CF3M)
 Bonnet material: cast AISI 316L (ASME SA351/351M GRADE CF3M)
 Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)
 Seal material: PTFE
 Position indicator as standard
 Valves DN32÷DN50 complying with 97/23 EC directive category I

BENEFITS

Waterhammer-free design
 Actuator housing rotation 360°
 For vacuum applications up to 10⁻² mbar

OPTIONS

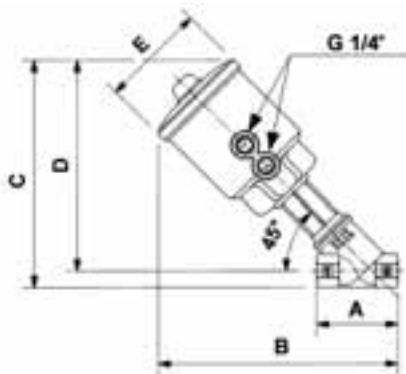
Manual override (ex. code RPG205STWM0) see page 22
 Flow regulator (ex. code RPG210STJR0) see page 22
 Travel switch (ex. code RPG208LTZ0) see page 22
 NPT connection (ex. code RPN205STW00)
 Weld ends see page 16



SELECTION TABLE

VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Actuator ø
				min (bar)	max (bar)		min (bar)	max (bar)	
Code	(ISO 228 G)	(mm)	(l/min)			(2 → 1)			(mm)
RPG205STW00	1/2"	15	98	0	16	under seat	2.5	10	63
RPG206STX00	3/4"	20	164	0	16	under seat	4.3	10	63
RPG207STY00	1"	25	260	0	16	under seat	5.5	10	63
RPG208STZ00	1 1/4"	32	410	0	16	under seat	6.5	10	63
RPG209STK00	1 1/2"	40	700	0	16	under seat	9	10	63
RPG210STJ00	2"	50	950	0	12	under seat	9.4	10	63
RPG207LTY00	1"	25	260	0	16	under seat	3	8	90
RPG208LTZ00	1 1/4"	32	410	0	16	under seat	4	8	90
RPG209LTK00	1 1/2"	40	700	0	16	under seat	5	8	90
RPG210LTJ00	2"	50	950	0	16	under seat	7	8	90

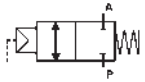
(1) Steam: Max. working pressure 10 bar (9 barg); (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts;



DIMENSIONS & WEIGHTS

Connection	Actuator ø	A	B	C	D	E	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	63	65	192	184	171	85	1.2
3/4"	63	75	198	192	176	85	1.3
1"	63	90	212	205	185	85	1.5
1 1/4"	63	110	225	217	193	85	1.9
1 1/2"	63	120	230	225	198	85	2.1
2"	63	150	248	241	207	85	2.9
1"	90	90	223	216	196	112	2.0
1 1/4"	90	110	234	227	202	112	2.4
1 1/2"	90	120	239	235	207	112	2.6
2"	90	150	257	250	216	112	3.3

2/2 WAY PISTON VALVE G 1/2" ÷ 2" BIDIRECTIONAL; STAINLESS STEEL



**normally closed
flow over / under seat**

TYPE: REGULAR BD

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam⁽¹⁾
 Media temperature: -10°C ... +180°C
 Ambient temperature: -10°C ... +60°C
 Pilot media: air, inert gases, water
 Body material: cast AISI 316L (ASME SA351/351M GRADE CF3M)
 Bonnet material: cast AISI 316L (ASME SA351/351M GRADE CF3M)
 Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)
 Seal material: PTFE
 Position indicator as standard
 Valves DN32÷DN50 complying with 97/23 EC directive category I

BENEFITS

Waterhammer-free design (with flow direction 2 → 1)
 Actuator housing rotation 360°
 Design suitable for vacuum applications up to 10⁻² mbar

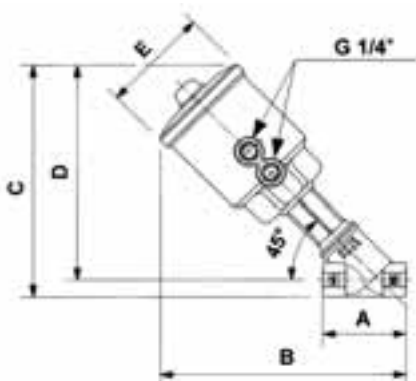
OPTIONS

Manual override (ex. code BPG205STWM0) see page 22
 Flow regulator (ex. code BPG210STJR0) see page 22
 Travel switch (ex. code BPG208LTZI0) see page 22
 NPT connection (ex. code BPN205STW00)
 Weld ends see page 16



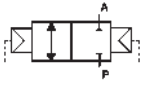
SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Actuator ø
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)		min (bar)	max (bar)	(mm)
	BPG205STW00	1/2"	15	98	0	16	1→2 2→1	5.5 / 3.8	10	63
BPG206STX00	3/4"	20	164	0	16	1→2 2→1	6 / 3.8	10	63	
BPG207STY00	1"	25	260	0	16 / 11	1→2 2→1	6.5 / 3.8	10	63	
BPG208STZ00	1 1/4"	32	410	0	16 / 6	1→2 2→1	6.8 / 3.8	10	63	
BPG209STK00	1 1/2"	40	700	0	12 / 4	1→2 2→1	9 / 3.8	10	63	
BPG210STJ00	2"	50	950	0	8 / 2.5	1→2 2→1	9 / 3.8	10	63	
BPG207LTY00	1"	25	260	0	16 / 14	1→2 2→1	4 / 3.3	8	90	
BPG208LTZ00	1 1/4"	32	410	0	16 / 12	1→2 2→1	5 / 3.3	8	90	
BPG209LTK00	1 1/2"	40	700	0	16 / 8	1→2 2→1	6 / 3.3	8	90	
BPG210LTJ00	2"	50	950	0	14 / 6	1→2 2→1	8 / 3.3	8	90	

(1) Steam: Max. working pressure 10 bar (9 barg); - (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts;



DIMENSIONS & WEIGHTS	Connection	Actuator ø	A	B	C	D	E	weight
	(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
	1/2"	63	65	192	184	171	85	1.2
	3/4"	63	75	198	192	176	85	1.3
	1"	63	90	212	205	185	85	1.5
	1 1/4"	63	110	225	217	193	85	1.9
	1 1/2"	63	120	230	225	198	85	2.1
	2"	63	150	248	241	207	85	2.9
	1"	90	90	223	216	196	112	2.0
	1 1/4"	90	110	234	227	202	112	2.4
	1 1/2"	90	120	239	235	207	112	2.6
	2"	90	150	257	250	216	112	3.3

2/2 WAY PISTON VALVE G 1/2" ÷ 2" DOUBLE ACTING; STAINLESS STEEL



**double acting
flow over / under seat**

TYPE: REGULAR DA

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam⁽¹⁾
 Media temperature: -10°C ... +180°C
 Ambient temperature: -10°C ... +60°C
 Pilot media: air, inert gases, water
 Body material: cast AISI 316L (ASME SA351/351M GRADE CF3M)
 Bonnet material: cast AISI 316L (ASME SA351/351M GRADE CF3M)
 Actuator body material: Polyamide PA6 (reinforced fiberglass 30%)
 Seal material: PTFE
 Position indicator as standard
 Valves DN32÷DN50 complying with 97/23 EC directive category I

BENEFITS

Waterhammer-free design (with flow direction 2 → 1)
 Actuator housing rotation 360°
 Design suitable for vacuum applications up to 10⁻² mbar

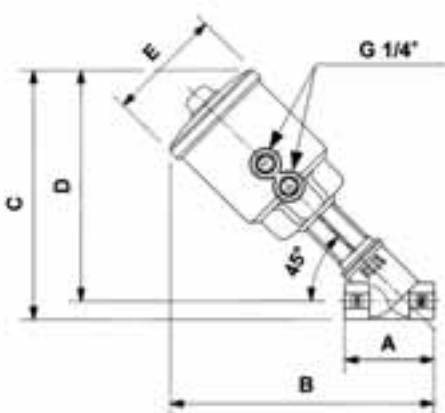
OPTIONS

Manual override (ex. code DPG205STWM0) see page 22
 Flow regulator (ex. code DPG210STJR0) see page 22
 Travel switch (ex. code DPG208LTZ!0) see page 22
 NPT connection (ex. code DPN205STW00)
 Weld ends see page 16



SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Actuator ø
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)		min (bar)	max (bar)	(mm)
	DPG205STW00	1/2"	15	98	0	16	1 ↔ 2	1.8	2	63
DPG206STX00	3/4"	20	164	0	16	1 ↔ 2	2	3.8	63	
DPG207STY00	1"	25	260	0	16	1 ↔ 2	3	5	63	
DPG208STZ00	1 1/4"	32	410	0	16	1 ↔ 2	4.5	6	63	
DPG209STK00	1 1/2"	40	700	0	16	1 ↔ 2	6.5	7	63	
DPG210STJ00	2"	50	950	0	12	1 ↔ 2	9	10	63	

(1) Steam: Max. working pressure 10 bar (9 barg); - (2) Minimum pilot pressure at max. working pressure; for lower working pressure see selection charts;



DIMENSIONS & WEIGHTS

Connection	Actuator ø	A	B	C	D	E	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	63	65	192	184	171	85	1.2
3/4"	63	75	198	192	176	85	1.3
1"	63	90	212	205	185	85	1.5
1 1/4"	63	110	225	217	193	85	1.9
1 1/2"	63	120	230	225	198	85	2.1
2"	63	150	248	241	207	85	2.9

MANUAL ANGLE SEAT VALVE, G 1/2" ÷ 2"; STAINLESS STEEL

flow over / under seat

TYPE: MG

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam⁽¹⁾

Media temperature: -10°C ... +180°C

Ambient temperature: -10°C ... +60°C

Body material: cast AISI 316L (ASME SA351/351M GRADE CF3M)

Bonnet material: stainless steel AISI 316L

Seal material: PTFE

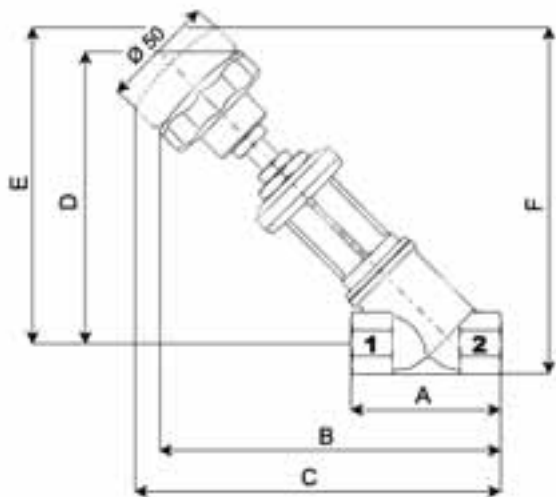


OPTIONS

NPT connection (ex. code MN2050TW00)

SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)	
	MG2050TW00	1/2"	15	98	0	40	1↔2
	MG2060TX00	3/4"	20	164	0	40	1↔2
	MG2070TY00	1"	25	260	0	40	1↔2
	MG2080TZ00	1 1/4"	32	410	0	25	1↔2
	MG2090TK00	1 1/2"	40	700	0	25	1↔2
	MG2100TJ00	2"	50	950	0	16	1↔2

(1) Steam: Max. working pressure 10 bar (9 barg);



DIMENSIONS & WEIGHTS

Connection	A	B	C	D	E	F	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	65	142	150	121	128	142	0.75
3/4"	75	148	155	126	133	150	0.80
1"	90	163	172	135	145	165	1.20
1 1/4"	110	175	188	143	156	181	1.80
1 1/2"	120	180	193	148	161	189	2.10
2"	150	198	212	157	170	205	3.10

2/2 WAY PISTON VALVES WITH WELDING CONNECTION; AISI 316L

TYPE: ALL TYPES

TECHNICAL SPECIFICATIONS

See general features at pages 10, 11, 12, 13, 14

OPTIONS

Weld connection for DIN 3239 pipe (Ex code BPF205STW00)

Manual override (Ex code PS205STWM0) see page 22

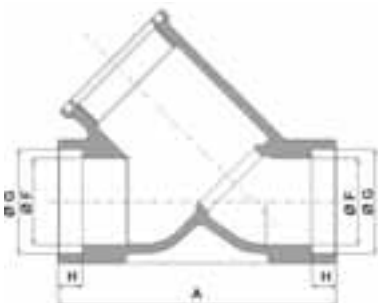
Flow regulator (Ex code BPB210STJR0) see page 22

Travel switch (Ex code RPW208LTZ10) see page 22

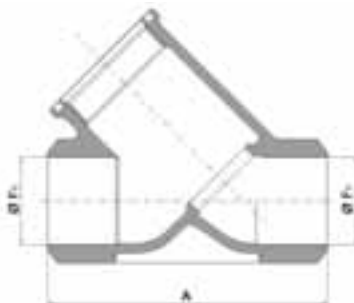


SELECTION TABLE

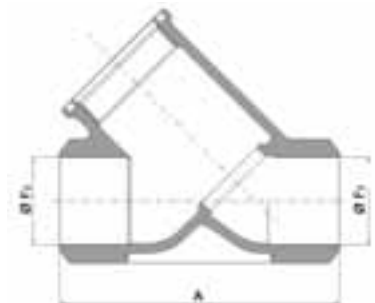
SOCKET WELD for ISO 65 / ANSI B 36.10 pipe			BUTT WELD for ISO 65 / ANSI B 36.10 pipe			BUTT WELD for DIN 11850 pipe			BUTT WELD for ISO 4200 pipe			
orifice Ø	actuator size Ø 45	actuator size Ø 63	actuator size Ø 90	actuator size Ø 45	actuator size Ø 63	actuator size Ø 90	actuator size Ø 45	actuator size Ø 63	actuator size Ø 90	actuator size Ø 45	actuator size Ø 63	actuator size Ø 90
(mm)	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code	Code
DN 15	PS205CTW00	PS205STW00	-	PB205CTW00	PB205STW00	-	PW205CTW00	PW205STW00	-	PH205CTW00	PH205STW00	-
DN 20	PS206CTX00	PS206STX00	-	PB206CTX00	PB206STX00	-	PW206CTX00	PW206STX00	-	PH206CTX00	PH206STX00	-
DN 25	-	PS207STY00	PS207LTY00	-	PB207STY00	PB207LTY00	-	PW207STY00	PW207LTY00	-	PH207STY00	PH207LTY00
DN 32	-	PS208STZ00	PS208LTZ00	-	PB208STZ00	PB208LTZ00	-	PW208STZ00	PW208LTZ00	-	PH208STZ00	PH208LTZ00
DN 40	-	PS209STK00	PS209LTK00	-	PB209STK00	PB209LTK00	-	PW209STK00	PW209LTK00	-	PH209STK00	PH209LTK00
DN 50	-	PS210STJ00	PS210LTJ00	-	PB210STJ00	PB210LTJ00	-	PW210STJ00	PW210LTJ00	-	PH210STJ00	PH210LTJ00



Valve with socket weld connection for ISO 65/ANSI B 36.10 pipe



Valve with butt weld connection for ISO 65/ANSI B 36.10 pipe
Welding ends complying with ISO 6761



Valve with butt weld connection for DIN 11850 pipe
Welding ends complying with ISO 6761



Valve with butt weld connection for ISO 4200 pipe
Welding ends complying with ISO 6761

DIMENSIONS	actuator size Ø	orifice Ø	A	Ø F	Ø F ₁	Ø F ₂	Ø F ₃	Ø G	H
	(mm)	(DN)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)
	45	15	65	17.4	17.4	16	18.1	22	5
	45	20	75	22.8	22.8	20	23.7	27.5	7
	63	15	65	17.4	17.4	16	18.1	22	5
	63	20	75	22.8	22.8	20	23.7	27.5	7
	63	25	90	28.3	28.3	26	29.7	34	8
	63	32	110	37.1	37.1	32	38.4	43	10
	63	40	120	42.7	42.7	38	44.3	49	12
	63	50	150	54.8	54.8	50	55.1	61.5	16
	90	25	90	28.3	28.3	26	29.7	34	8
	90	32	110	37.1	37.1	32	38.4	43	10
	90	40	120	42.7	42.7	38	44.3	49	12
	90	50	150	54.8	54.8	50	55.1	61.5	16

Note: For overall dimensions please refer to pages 10, 11, 12, 13, 14

2/2 WAY PISTON VALVES WITH FLANGED CONNECTION; AISI 316L

TECHNICAL SPECIFICATIONS

See general features at pages 10, 11, 12, 13, 14 of General Catalogue

BENEFITS

Waterhammer-free design for BPA-BPD types (flow direction 2 → 1)

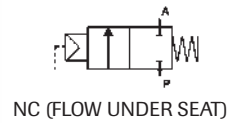
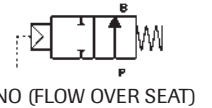
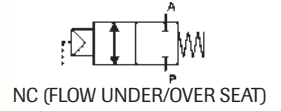
OPTIONS

Manual override (Ex. code BPA205STW00)

Flow regulator (Ex. code PD210STJR0)

Travel switch (Ex. code RPD208LTZ0)

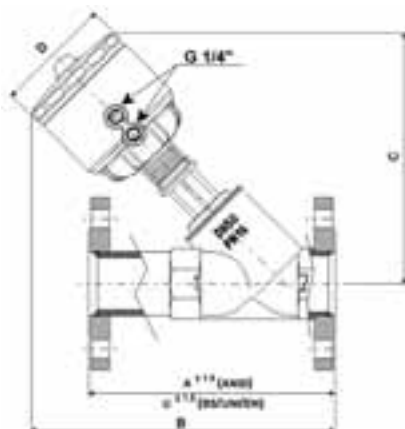
TYPE: REGULAR (NO-NC-BD)



SELECTION TABLE

FLANGES TO BS 4504 (EN1092 shape B)							BODY PRESSURE (PN)	PED (COMPLIANCE)
ACTUATOR Ø 63 mm			ACTUATOR Ø 90 mm					
orifice Ø	BD	NC	NO	BD	NC	NO		
(mm)	Code	Code	Code	Code	Code	Code		
DN 15	BPD205STW00	PD205STW00	RPD205STW00	-	-	-	40	SEP.
DN 20	BPD206STX00	PD206STX00	RPD206STX00	-	-	-		
DN 25	BPD207STY00	PD207STY00	RPD207STY00	BPD207LTY00	PD207LTY00	RPD207LTY00		
DN 32	BPD208STZ00	PD208STZ00	RPD208STZ00	BPD208LTZ00	PD208LTZ00	RPD208LTZ00	25	I
DN 40	BPD209STK00	PD209STK00	RPD209STK00	BPD209LTK00	PD209LTK00	RPD209LTK00		
DN 50	BPD210STJ00	PD210STJ00	RPD210STJ00	BPD210LTJ00	PD210LTJ00	RPD210LTJ00		
DN 15	BPD210STJ00	PD210STJ00	RPD210STJ00	BPD210LTJ00	PD210LTJ00	RPD210LTJ00	16	

FLANGE CONNECTION TO ANSI B16.5 CLASS 150						
ACTUATOR Ø 63 mm			ACTUATOR Ø 90 mm			
orifice Ø	BD	NC	NO	BD	NC	NO
(mm)	Code	Code	Code	Code	Code	Code
DN 15	BPA205STW00	PA205STW00	RPA205STW00	-	-	-
DN 20	BPA206STX00	PA206STX00	RPA206STX00	-	-	-
DN 25	BPA207STY00	PA207STY00	RPA207STY00	BPA207LTY00	PA207LTY00	RPA207LTY00
DN 32	BPA208STZ00	PA208STZ00	RPA208STZ00	BPA208LTZ00	PA208LTZ00	RPA208LTZ00
DN 40	BPA209STK00	PA209STK00	RPA209STK00	BPA209LTK00	PA209LTK00	RPA209LTK00
DN 50	BPA210STJ00	PA210STJ00	RPA210STJ00	BPA210LTJ00	PA210LTJ00	RPA210LTJ00



DIMENSIONS & WEIGHTS

Ø orifice	Ø actuator	A* (ANSI)	U* (UNI)	B	C	D	weight
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(Kg)
DN 15	63	139.7	130	218	194	85	2,6
DN 20	63	152.4	150	236	210	85	3,0
DN 25	63	165.1	160	239	208	85	3,8
DN 32	63	184.2	180	252	216	85	5,6
DN 40	63	203.2	200	257	220	85	6,9
DN 50	63	228.6	230	275	230	85	8,7
DN 25	90	165.1	160	250	219	112	4,4
DN 32	90	184.2	180	263	227	112	6,0
DN 40	90	203.2	200	268	232	112	6,9
DN 50	90	228.6	230	286	240	112	9,1

A: face to face to ANSI B 16.10

U: sface to face to EN 558-1

2/2 WAY PISTON VALVE WITH CLAMP CONNECTION; AISI 316L

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam
Media temperature: -10°C ... +180°C
Ambient temperature: -10°C ... +60°C
Pilot media: air, inert gases
Body material: AISI 316L (ASME SA351/351M GRADE CF3M)
Clamp material: AISI 316L (ASME SA351/351M GRADE CF3M)
Bonnet material: AISI 316L (ASME SA351/351M GRADE CF3M)
Actuator body material: Polyamide PA6 (reinforced fibreglass 30%)
Seal material: PTFE
Position indicator as standard
Gasket and clamp not included
Connection to ISO 2852 or DIN 32676(*)

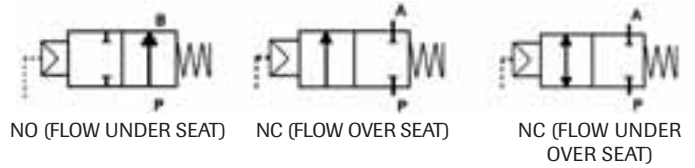
BENEFITS

Waterhammer-free design for BPC version (with flow direction 2→1)
Actuator housing rotation 360°
Design suitable for vacuum applications up to 10 ⁻² mbar

OPTIONS

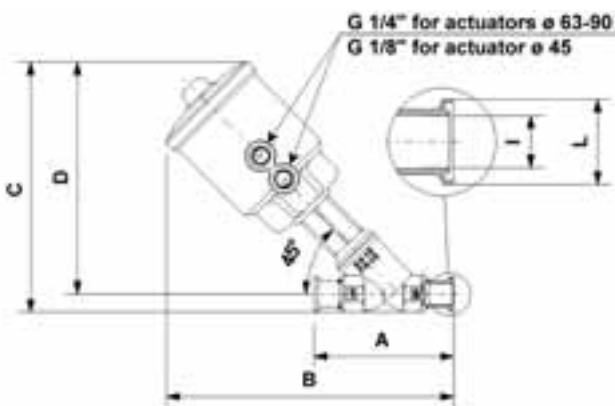
Manual override (Ex code BPC205STWM0)
Flow regulator (Ex code PC210STJR0)
Travel switch (Ex code RPC208LTZ[0])

TYPE: COMPACT E REGULAR (NO-NC-BD)



SELECTION TABLE	ACTUATOR Ø 45 mm			ACTUATOR Ø 63 mm			ACTUATOR Ø 90 mm			
	orifice Ø	BD	NC	NO	BD	NC	NO	BD	NC	NO
	(mm)	Code	Code	Code	Code	Code	Code	Code	Code	Code
DN 15	BPC203CTW00	PC203CTW00	RPC203CTW00	BPC203STW00	PC203STW00	RPC203STW00	-	-	-	-
DN 15	BPC205CTW00*	PC205CTW00*	RPC205CTW00*	BPC205STW00*	PC205STW00*	RPC205STW00*	-	-	-	-
DN 20	BPC206CTX00	PC206CTX00	RPC206CTX00	BPC206STX00	PC206STX00	RPC206STX00	-	-	-	-
DN 25	-	-	-	BPC207STY00	PC207STY00	RPC207STY00	BPC207LTY00	PC207LTY00	RPC207LTY00	RPC207LTY00
DN 32	-	-	-	BPC208STZ00	PC208STZ00	RPC208STZ00	BPC208LTZ00	PC208LTZ00	RPC208LTZ00	RPC208LTZ00
DN 40	-	-	-	BPC209STK00	PC209STK00	RPC209STK00	BPC209LTK00	PC209LTK00	RPC209LTK00	RPC209LTK00
DN 50	-	-	-	BPC210STJ00	PC210STJ00	RPC210STJ00	BPC210LTJ00	PC210LTJ00	RPC210LTJ00	RPC210LTJ00

* According to DIN 32676



DIMENSIONS & WEIGHTS

orifice Ø	act. Ø	A	B	C	D	I	L	weight
(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(Kg)
DN 15	45	102	163	135	123	15,5	25	0,83
DN 15	45	102	162	140	123	15,5	34	0,83
DN 20	45	114	167	151	125	21,5	50,5	1,10
DN 15	63	102	210	184	170	15,5	25	1,3
DN 15	63	102	210	188	170	15,5	34	1,3
DN 20	63	114	217	201	176	21,5	50,5	1,5
DN 25	63	129	231	210	185	26	50,5	1,8
DN 32	63	140	240	225	192	35	64	2,4
DN 40	63	159	249	230	197	41	64	2,8
DN 50	63	190	267	245	206	55,3	77,5	3,6
DN 25	90	129	243	221	196	26	50,5	2,4
DN 32	90	140	251	236	204	35	64	2,8
DN 40	90	159	260	240	209	41	64	3,2
DN 50	90	190	279	256	217	55,3	77,5	4,0

PERFORMANCE TABLE

BD	VALVE	actuator Ø	nominal Ø	flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾	
	Code	(mm)	(mm)	(l/min)	min (bar)	max (bar)		min (bar)	max (bar)
	BPC203CTW00	45	15	98	0	10	1 → 2 / 2 → 1	6.2 / 5	10
BPC205CTW00	45	15	98	0	10	1 → 2 / 2 → 1	6.2 / 5	10	
BPC206CTX00	45	20	164	0	10	1 → 2 / 2 → 1	8.7 / 5	10	
BPC203STW00	63	15	98	0	10	1 → 2 / 2 → 1	5.5 / 3.8	10	
BPC205STW00	63	15	98	0	10	1 → 2 / 2 → 1	5.5 / 3.8	10	
BPC206STX00	63	20	164	0	10	1 → 2 / 2 → 1	6 / 3.8	10	
BPC207STY00	63	25	260	0	10	1 → 2 / 2 → 1	6.5 / 3.8	10	
BPC208STZ00	63	32	410	0	10	1 → 2 / 2 → 1	6.8 / 3.8	10	
BPC209STK00	63	40	700	0	10	1 → 2 / 2 → 1	9 / 3.8	10	
BPC210STJ00	63	50	950	0	10	1 → 2 / 2 → 1	9 / 3.8	10	
BPC207LTY00	90	25	260	0	10	1 → 2 / 2 → 1	4 / 3.3	8	
BPC208LTZ00	90	32	410	0	10	1 → 2 / 2 → 1	5 / 3.3	8	
BPC209LTK00	90	40	700	0	10	1 → 2 / 2 → 1	6 / 3.3	8	
BPC210LTJ00	90	50	650	0	10	1 → 2 / 2 → 1	8 / 3.3	8	

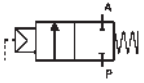
NC	VALVE	actuator Ø	nominal Ø	flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾	
	Code	(mm)	(mm)	(l/min)	min (bar)	max (bar)	(1 → 2)	min (bar)	max (bar)
	PC203CTW00	45	15	98	0	10	over seat	3.8	10
PC205CTW00	45	15	98	0	10	over seat	3.8	10	
PC206CTX00	45	20	164	0	10	over seat	5.8	10	
PC203STW00	63	15	98	0	10	over seat	3.7	10	
PC205STW00	63	15	98	0	10	over seat	3.7	10	
PC206STX00	63	20	164	0	10	over seat	4.4	10	
PC207STY00	63	25	260	0	10	over seat	5.9	10	
PC208STZ00	63	32	410	0	10	over seat	9	10	
PC209STK00	63	40	700	0	10	over seat	9	10	
PC210STJ00	63	50	950	0	10	over seat	8	10	
PC207LTY00	90	25	260	0	10	over seat	2	8	
PC208LTZ00	90	32	410	0	10	over seat	3.5	8	
PC209LTK00	90	40	700	0	10	over seat	4	8	
PC210LTJ00	90	50	950	0	10	over seat	6.5	8	

NO	VALVE	actuator Ø	nominal Ø	flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾	
	Code	(mm)	(mm)	(l/min)	min (bar)	max (bar)	(2 → 1)	min (bar)	max (bar)
	RPC203CTW00	45	15	98	0	10	under seat	4	10
RPC205CTW00	45	15	98	0	10	under seat	4	10	
RPC206CTX00	45	20	164	0	10	under seat	6.2	10	
RPC203STW00	63	15	98	0	10	under seat	2.5	10	
RPC205STW00	63	15	98	0	10	under seat	2.5	10	
RPC206STX00	63	20	164	0	10	under seat	4.3	10	
RPC207STY00	63	25	260	0	10	under seat	5.5	10	
RPC208STZ00	63	32	410	0	10	under seat	6.5	10	
RPC209STK00	63	40	700	0	10	under seat	9	10	
RPC210STJ00	63	50	950	0	10	under seat	9.4	10	
RPC207LTY00	90	25	260	0	10	under seat	3	8	
RPC208LTZ00	90	32	410	0	10	under seat	4	8	
RPC209LTK00	90	40	700	0	10	under seat	5	8	
RPC210LTJ00	90	50	950	0	10	under seat	7	8	

(1) Steam: working pressure max 10 bar (9 barg);

(2) Minimum pilot pressure at max working pressure; for lower working pressure see selection chart of "PAV" M&M Catalogue (Page 28-33).
For the different code e.g. PC205STW00 see the equivalent code PG205STW00.

2/2 WAY PISTON VALVE G 1/2 ÷ 2; AISI 316L HIGH TEMPERATURE VERSION



**normally closed
flow over seat**

TYPE: NC

TECHNICAL SPECIFICATIONS

Media: water, oil, air, aggressive media and steam MAX 196°C⁽¹⁾
 Media temperature: -10°C ... +196°C
 Ambient temperature: -10°C ... +60°C
 Pilot media: air, inert gases
 Body material: AISI 316L (ASME SA351/351M GRADE CF3M)
 Bonnet material: AISI 316L (ASME SA351/351M GRADE CF3M)
 Actuator body material: Polyamide PA6 (reinforced fibreglass 30%)
 Seal material: PTFE
 Position indicator as standard
 Valves DN32–DN50 complying with 97/23/EC Directive Category

BENEFITS

Actuator housing rotation 360°

OPTIONS

Manual override (Ex code PG205STW0H) see page 22
 Flow regulator (Ex code PG210LTJR0H) see page 22
 Travel switch (Ex code PG208LTZ0H) see page 22
 NPT connection (Ex code PN205STW0H)
 Welding connection see page 16 (Ex Code PS205STW0H)

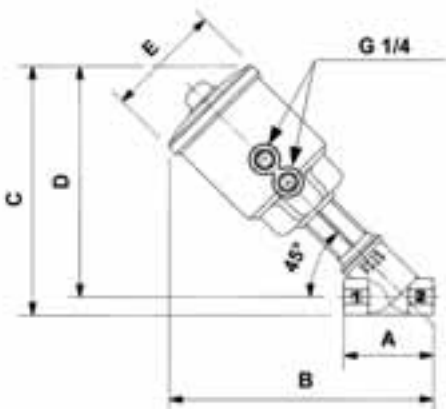


SELECTION TABLE

VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction	Pilot pressure ⁽²⁾		Actuator ø
				min (bar)	max (bar)		min (bar)	max (bar)	
Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)	1 → 2	min (bar)	max (bar)	(mm)
PG205STW0H	1/2"	15	98	0	20 ⁽¹⁾	over seat	3.7	10	63
PG206STX0H	3/4"	20	164	0	20 ⁽¹⁾	over seat	4.4	10	63
PG207STY0H	1"	25	260	0	20 ⁽¹⁾	over seat	2	8	63
PG208LTZ0H	1 1/4"	32	410	0	16 ⁽¹⁾	over seat	3.5	8	90
PG209LTK0H	1 1/2"	40	700	0	16 ⁽¹⁾	over seat	4	8	90
PG210LTJ0H	2"	50	950	0	15 ⁽¹⁾	over seat	6.5	8	90

(1) Steam: Max working pressure 14 bar (13 barg);

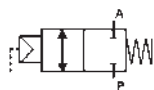
(2) Minimum pilot pressure at max working pressure; for lower working pressures see selection table;



DIMENSION & WEIGHTS

connection	actuator ø	A	B	C	D	E	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	63	65	192	184	171	85	1.2
3/4"	63	75	198	192	176	85	1.3
1"	63	90	212	205	185	85	1.5
1 1/4"	90	110	234	227	202	112	2.4
1 1/2"	90	120	239	235	207	112	2.6
2"	90	150	257	250	216	112	3.3

2/2 WAY PISTON VALVE G 1/2 ÷ 2; AISI 316L HIGH TEMPERATURE VERSION



**normally closed
flow over/under seat**

TYPE: BD

TECHNICAL SPECIFICATIONS

- Media: water, oil, air, aggressive media and steam MAX 196°C⁽¹⁾
- Media temperature: -10°C ... +196°C
- Ambient temperature: -10°C ... +60°C
- Pilot media: air, inert gases
- Body material: AISI 316L (ASME SA351/351M GRADE CF3M)
- Bonnet material: AISI 316L (ASME SA351/351M GRADE CF3M)
- Actuator body material: Polyamide PA6 (reinforced fibreglass 30%)
- Seal material: PTFE
- Position indicator as standard
- Valves DN32÷DN50 complying with 97/23/EC Directive Category

BENEFITS

- Actuator housing rotation 360°
- WATERHAMMER-FREE DESIGN (with flow direction 2 → 1)

OPTIONS

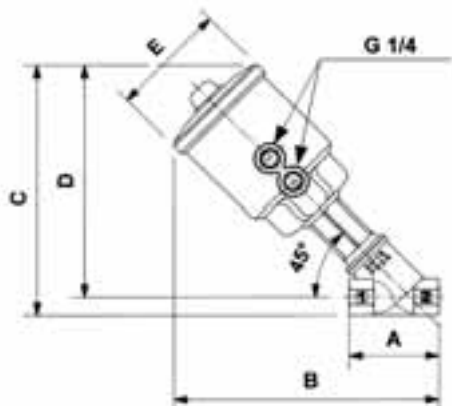
- Manual override (Ex code BPG205STWMH) see page 22
- Flow regulator (Ex code BPG210LTJRH) see page 22
- Travel switch (Ex code BPG208LTZIH) see page 22
- NPT connection (Ex code BPN205STW0H)
- Welding connection see page 16 (Ex code BPS205STW0H)



SELECTION TABLE	VALVES	connection	DN orifice	Flow rate Kv	Working pressure ⁽¹⁾		Flow direction		Pilot pressure ⁽²⁾		Actuator ø
	Code	(ISO 228 G)	(mm)	(l/min)	min (bar)	max (bar)	1 → 2	2 → 1	min (bar)	max (bar)	(mm)
	BPG205STW0H	1/2"	15	98	0	16 ⁽¹⁾	1 → 2	2 → 1	5.5 / 3.8	10	63
BPG206STX0H	3/4"	20	164	0	16 ⁽¹⁾	1 → 2	2 → 1	6 / 3.8	10	63	
BPG207STY0H	1"	25	260	0	16 ⁽¹⁾ /11 ⁽²⁾	1 → 2	2 → 1	6.5 / 3.8	10	63	
BPG208LTZ0H	1 1/4"	32	410	0	16 ⁽¹⁾ /12	1 → 2	2 → 1	5 / 3.3	8	90	
BPG209LTK0H	1 1/2"	40	700	0	16 ⁽¹⁾ /8	1 → 2	2 → 1	6 / 3.3	8	90	
BPG210LTJ0H	2"	50	950	0	14 ⁽²⁾ /5	1 → 2	2 → 1	8 / 3.3	8	90	

(1) Steam: Max working pressure 14 bar (13 barg);

(2) Minimum pilot pressure at max working pressure; for lower working pressures see selection table;



DIMENSION & WEIGHTS

connection	actuator ø	A	B	C	D	E	weight
(ISO 228 G)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(kg)
1/2"	63	65	192	184	171	85	1.2
3/4"	63	75	198	192	176	85	1.3
1"	63	90	212	205	185	85	1.5
1 1/4"	90	110	234	227	202	112	2.4
1 1/2"	90	120	239	235	207	112	2.6
2"	90	150	257	250	216	112	3.3

AVAILABLE OPTIONS

STROKE REGULATOR

TECHNICAL SPECIFICATIONS

The stroke regulator allows the flow to be adjusted from 0% to 100%.

Beneficial integration of position indicator.

On normally open valve it serves as manual override.

- This option must be expressly required upon order. It is available for 63/90 valve series only.

Example: code CG205STWR0



TRAVEL SWITCH

TECHNICAL SPECIFICATIONS

The travel switch detects the position of the valve (open or closed) relaying back an electrical signal.

The signal is provided by a magnetic sensor with a non-contact switch.

Max switching voltage: 500 V;

Max switching current: 0.5 A;

Max switching power: 30 W/VA;

Max switching frequency: 150 Hz;

Contact actuation time: 4.5 ms;

Repeatability: ± 0.3 mm;

Temperature limits: $-25^{\circ}\text{C} + 100^{\circ}\text{C}$;

Protection class: IP67;

Housing material: Electroless nickel plated brass;

Plug for cable 3x0,5 mm² 4-6 mm dia. (DIN IEC 60947/5/2)

- This option must be expressly required upon order. It is available for 63/90 valve series only.

Example: code RCG205STW|0



MANUAL OVERRIDE

TECHNICAL SPECIFICATIONS

The manual override allows to open or close the valve in emergency cases (lack of air pressure, electrical failure, pilot valve damaged).

For the normally open version this function is performed by the "stroke regulator".

- This option must be expressly required upon order. It is available for 63/90 valve series only.

Example: code CG208STZM0



AVAILABLE OPTIONS

TRAVEL SWITCH CONVERSION KIT

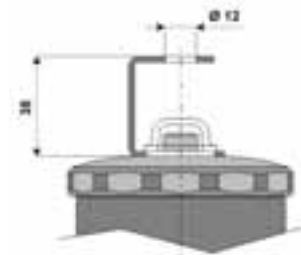
FEATURES AND BENEFITS

This kit allows the installation of a position switch to detect the position of the valve by means of an electrical signal.

- Suitable for all valves
- Easy installation at user's care, even on site
- Keeps the optical view of the valve position through the upper sight dome
- Suitable for magnetic or inductive commercial switches with M12 or M8 thread upon customer's choice

How to order:

- part number 857 018 000
- switch and plug not included (see below)



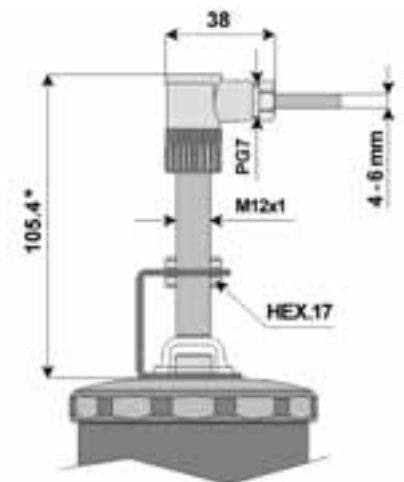
MAGNETIC SWITCH FOR CONVERSION KIT

TECHNICAL SPECIFICATIONS

M&M offers 2 types of standard magnetic switch to be purchased in addition to the conversion kit.

Other types of switches can be outsourced directly by the customer, provided that they comply with M&M kit mounting specifications.

technical specifications	MAGNETIC SWITCHES	
	TYPE A - code 680 001 000	TYPE B - code 680 002 000
Contact:	free NC, NO switch	free NC, NO switch
Repeatability:	+/- 0,3 mm	+/- 0,3 mm
Temperature limits:	-25C° + 100C°	-25C° + 100C°
Protection class:	IP67	IP67
Max switching voltage:	500V	150V
Max switching current:	0,5A	1A
Max switching power:	30W / VA	20W / VA
Contact actuation time:	4,5 ms	2 ms
Connection:	plug to screw clamp connection DIN IEC 60947/5/2	whit cable (5mt)
Cable:	3 x 0,25 mm ²	3 x 0,25 mm ²



* Type code 680 002 000 = 65 mm high

TYPE A: SWITCH + CONNECTOR



680 001 000

600 012 000

TYPE B: SWITCH + 5 mt. CABLE



680 002 000

3/2 WAY DIRECT ACTING PILOT VALVES



normally closed

TYPE: B356 / B326 / D326

TECHNICAL SPECIFICATIONS

Media: water, inert gases, air
Media temperature: -10°C ... +60°C
Ambient temperature: -10°C ... +60°C
Body material: brass (CW614N EN 12165) with electroless nickel plating treatment
Operator material: stainless steel
Seal material: FKM
Coil power Series 2000: AC 10VA (holding) AC 16VA (inrush) DC 7W
Coil power Series 7000: AC 18VA (holding) AC 36VA (inrush) DC 14W
Protection class: IP 65 (with connector)

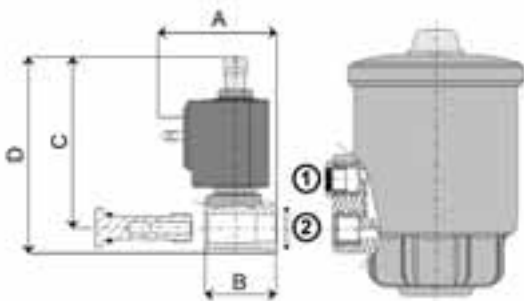


BENEFITS

- Standard manual override and electroless nickel plating treatment
- Expressly designed to pilot M&M Piston Valves
- Valve rotation by 360° around port

SELECTION TABLE

VALVE	actuator	hose connection	nominal diameter	flow rate kv	OPD		COILS		
					min	max	Code	(Volts/Hz)	
Code			(mm)		(bar)	ac	dc		
B356CVCMK	Ø 45	"push-in" pneumatic fitting for 6mm external Ø tube	1,5	0.7	0	10	10	2250	24/dc
B326CVCMK	Ø 63		1,5	0.7	0	10	10	2200	24/50 - 60
D326CVEMK	Ø 90		2,0	1.3	0	10	10	2400	110/50 - 120/60
								2600	200/50 - 220/60
								2700	230/50 - 240/60
								7250	24/dc
								7200	24/50 - 60
								7400	110/50 - 120/60
								7600	200/50 - 220/60
								7700	230/50 - 240/60



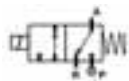
DIMENSIONS & WEIGHTS

Valve	A	B	C	D	weight
-	(mm)	(mm)	(mm)	(mm)	(Kg)
B356	48	31	66.5	76.5	0.25
B326	51.5	34.5	66.3	78.3	0.25
D326	57	34.5	82.6	94.6	0.30

Screw the pilot valve bolt into the inlet port of the piston valve actuator using a maximum torque level of 5 Nm:

- into hole 1, if the piston valve is **NORMALLY OPEN (RPG/RCG)**
- into hole 2, if the piston valve is **NORMALLY CLOSED (PG-BPG/CG-BCG)**

PILOT VALVE 3/2 WAY DIRECT ACTING FOR POTENTIALLY EXPLOSIVE ATMOSPHERES



normally closed

TYPE: N326CVE

SOLENOID VALVE FITTED WITH EXPLOSION-PROF OPERATOR, CLASS EEx m II T4

TECHNICAL SPECIFICATIONS

- Media: water, oil, air
- Media temperature: -10°C ... +60°C
- Ambient temperature: -20°C ... +50°C
- Body material: brass (CW614N EN 12165) with electroless nickel plating treatment
- Operator material: stainless steel
- Protection class: EEx m II T4
- Seal material: FKM
- Degree of protection: IP65

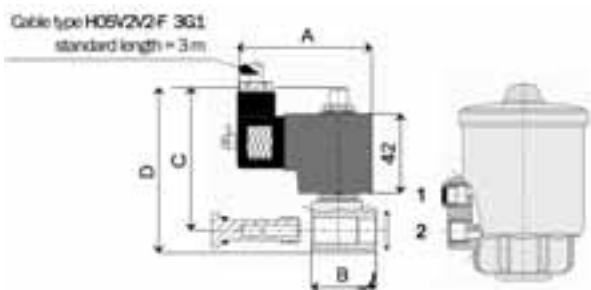
BENEFITS

- Coils are supplied with 3 meters power cable, wired a non removable plug
- Expressly designed to pilot M&M Piston Valve
- Valve rotation by 360° around port
- Manual override not available
- Spare parts not available. The valve is supplied c/w coil and plug



SELECTION TABLE	VALVE		nominal diameter	flow rate kv	OPD			COILS		Power	FUSES*
	connection				min	max		Code	(Volts/Hz)		
	Code		(mm)	(l/min)	(bar)	ac	dc			Holding	(m/A)
	N326CVE	PUSH-IN pneumatic fitting for 6 mm plastic Ø tube	2.0	1.3	0	10	10	N253	24/dc	10,1 w	800
								N203	24/50 -60	7,2 VA	800
								N403	110/50	9,1 VA	200
								NK03	120/60	8,6 VA	200
								N703	230/50	8,5 VA	100

* A mains fuse or an equivalent means of protection (breaking value shown on table for each coil) shall be installed on the mains supply line. Absence of mains protection is a non conformity to safety standards (EC Directives 94/9/CE and 1999/92/CE) and is a possible cause of explosion.



- MAXIMUM TORQUE 12 Nm
- use port 1 for **NORMALLY OPEN** valves (RPG/RCG)
 - use port 2 for **NORMALLY CLOSED** valves (PG-BPG/CG-BCG)

DIMENSIONS & WEIGHTS

Valve	A	B	C	D	weight
-	(mm)	(mm)	(mm)	(mm)	(Kg)
N326	72	34.5	74	86	0.68

VALVE SELECTION

Piston valves use an external control fluid to pilot the actuator in which a piston is directly connected to the main seal that closes onto the main orifice, thereby controlling the flow of liquids and gases.

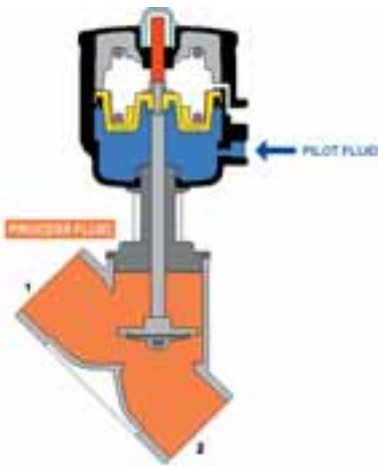
They are highly recommended when one or more of the following conditions are given:

- ✓ Media with a high content of dirt particles
- ✓ Highly viscous media (up to 600 cST (80°E); 1 centistoke=1 mm²/s)
- ✓ High flow volumes
- ✓ High ambient temperatures
- ✓ Environment with high humidity or hazardous locations

M&M INTERNATIONAL PISTON VALVE VERSIONS

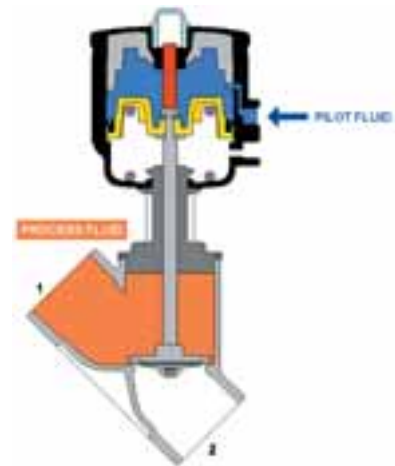
NC VALVE – Flow overseat

The pilot fluid pressure to open, a spring to close.



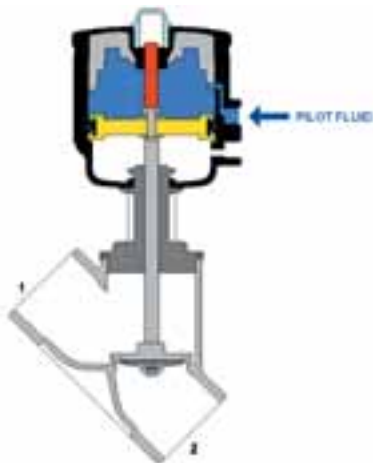
NO VALVE – Flow underseat

The pilot fluid pressure to close, a spring to keep open.



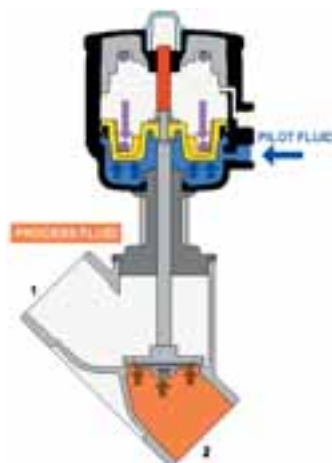
DOUBLE ACTING VALVE FLOW OVERSEAT OR UNDERSEAT

The pilot fluid both to open and close.
No springs.
This mode requires **two** pilot valves.

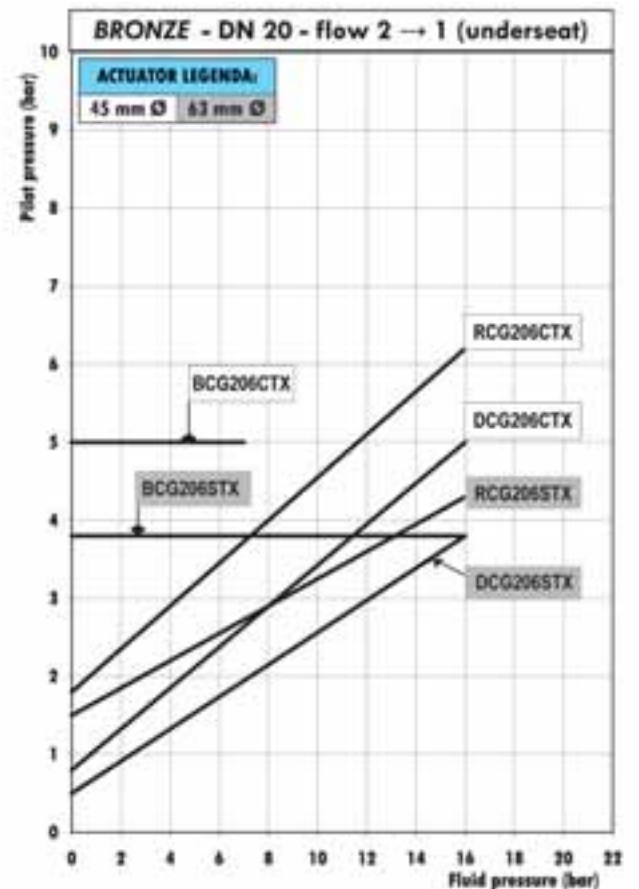
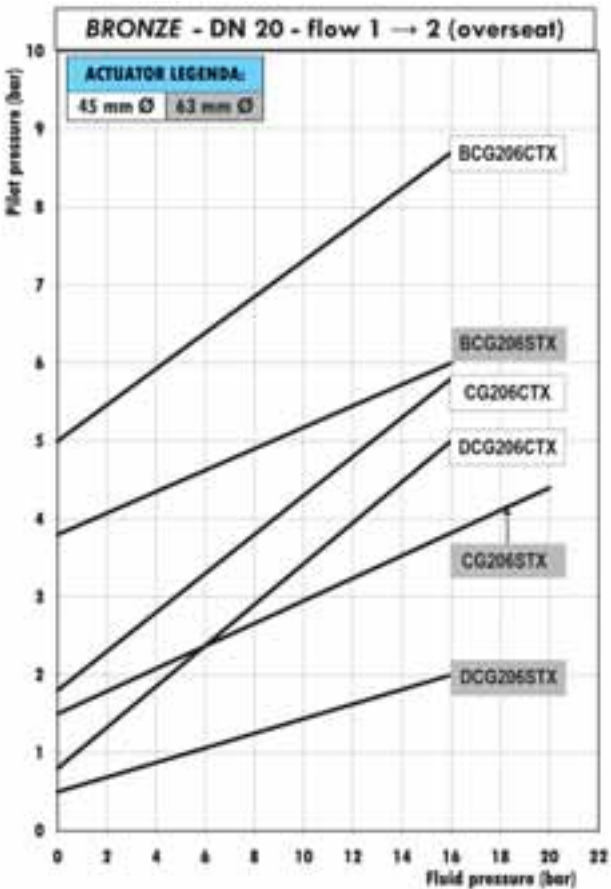
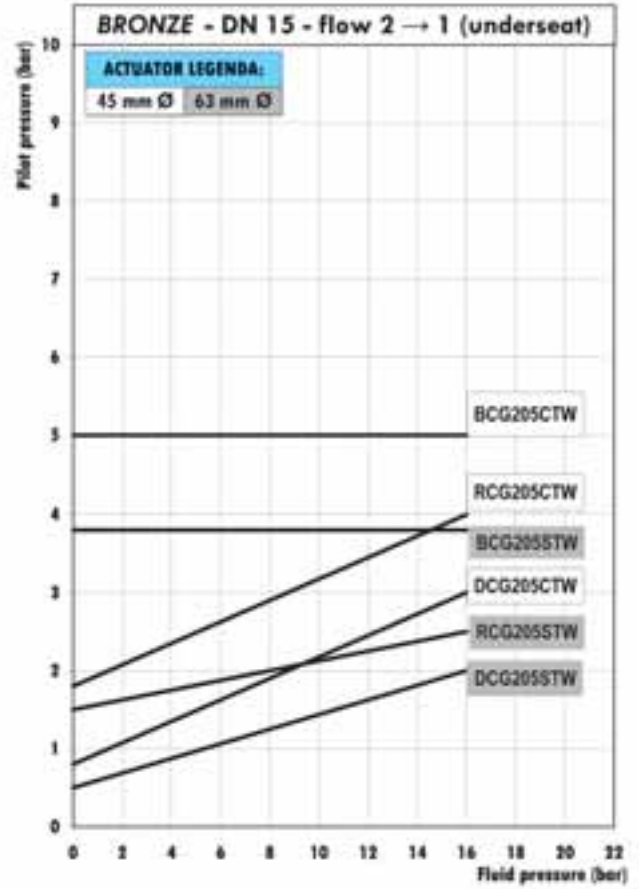
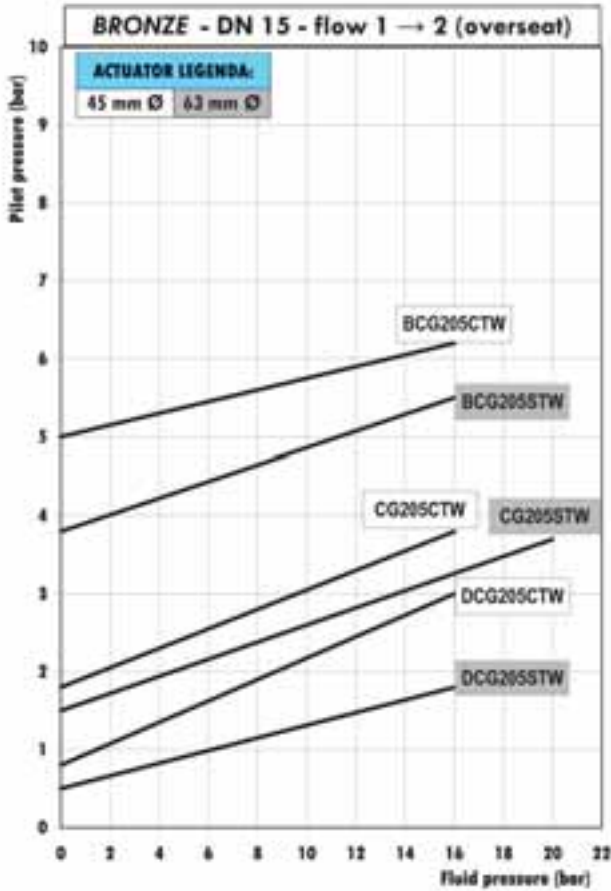


BIDIRECTIONAL NC FLOW OVERSEAT OR UNDERSEAT

Two springs allow use of the valve both with overseat and underseat operation.



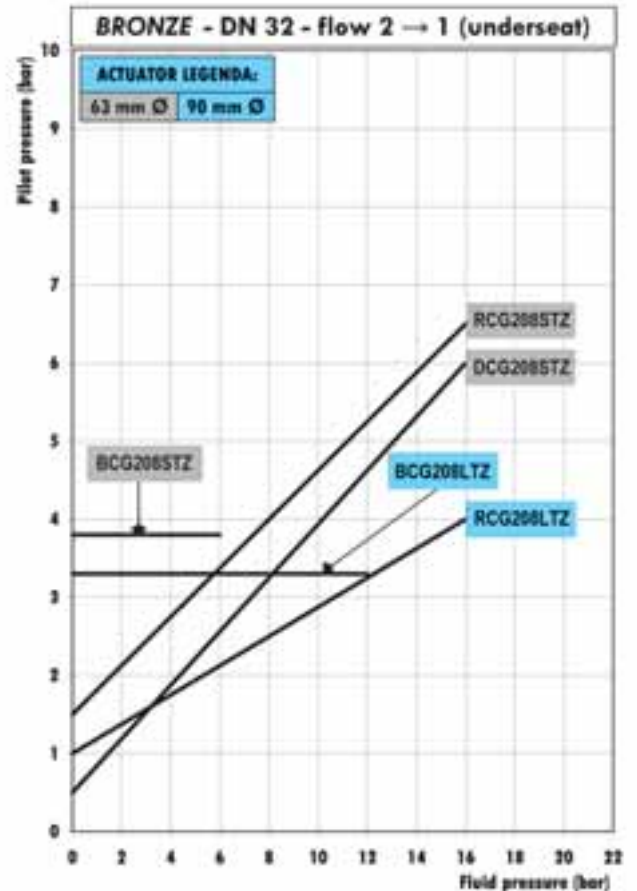
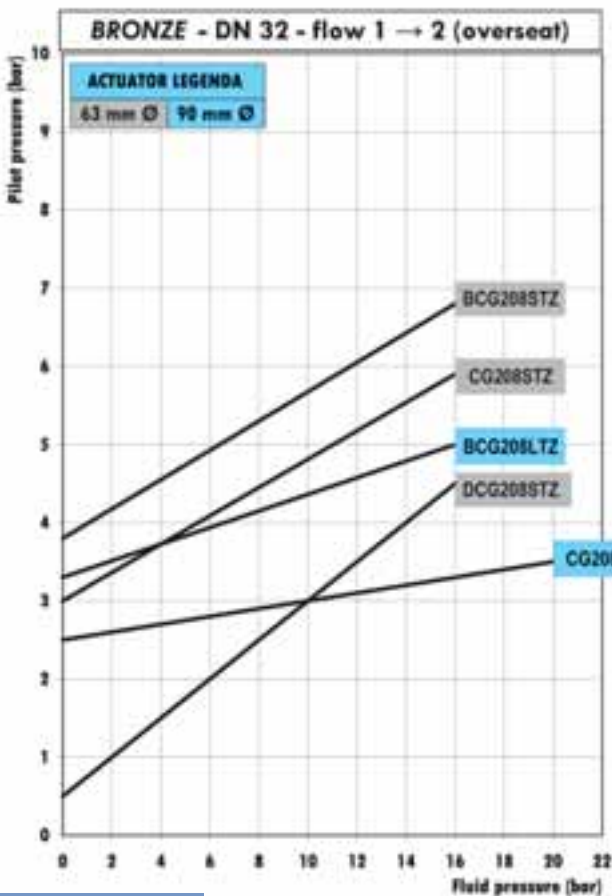
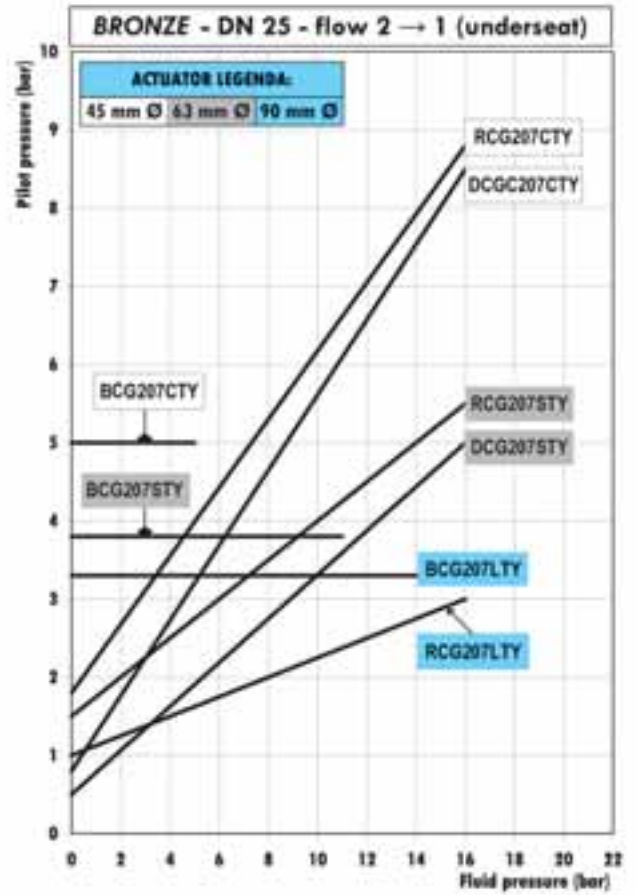
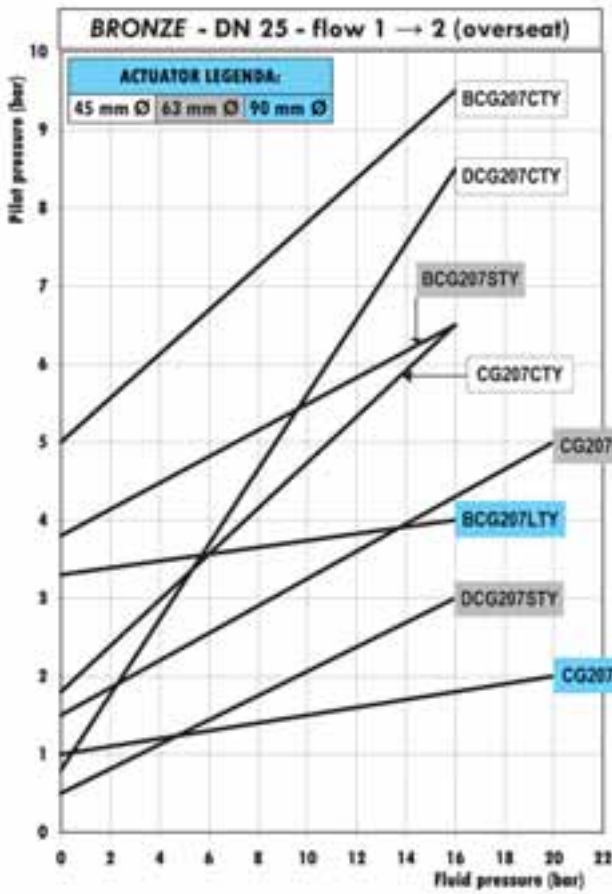
BRONZE VALVES SELECTION CHART DN15-DN20



MODEL LEGENDA:

CG = NORMALLY CLOSED	BCG = NORMALLY CLOSED (ANTI-WATERHAMMER)	RCG = NORMALLY OPEN	DCG = DOUBLE EFFECT
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BRONZE VALVES SELECTION CHART DN25-DN32



MODEL LEGENDA:

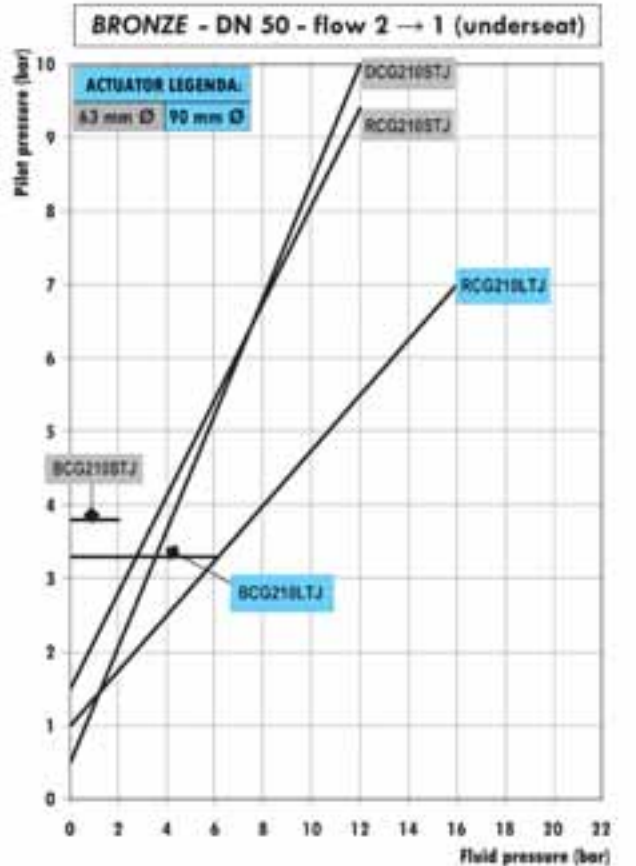
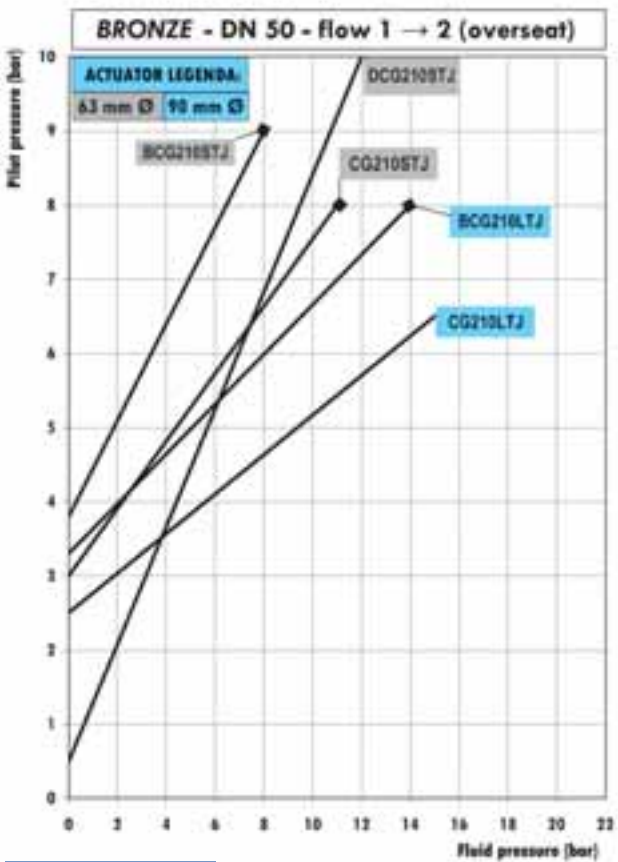
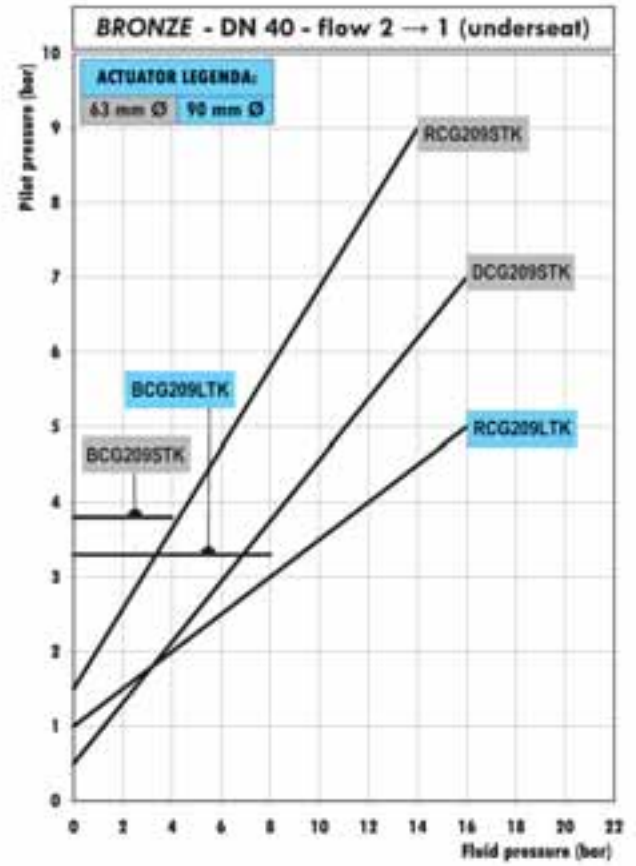
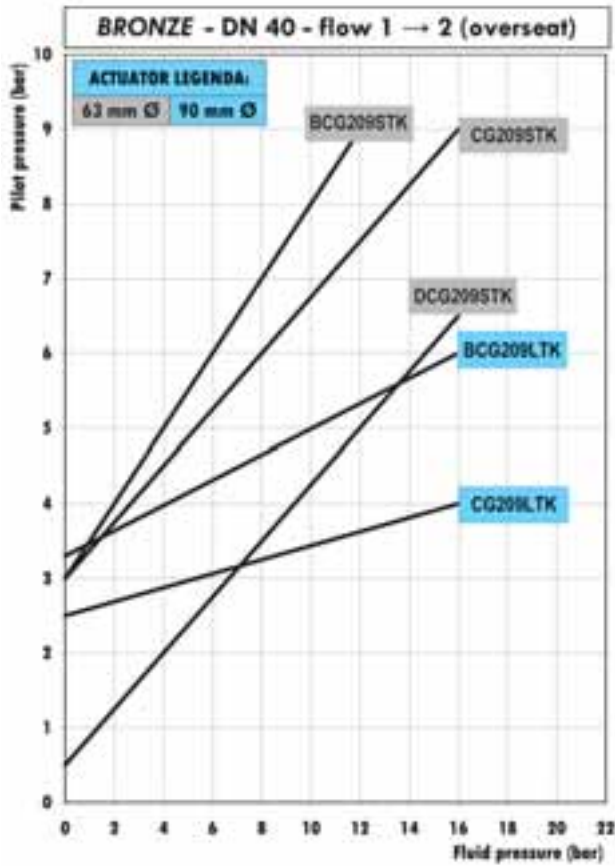
CG = NORMALLY CLOSED

BCG = NORMALLY CLOSED (ANTI-WATERHAMMER)

RCG = NORMALLY OPEN

DCG = DOUBLE EFFECT

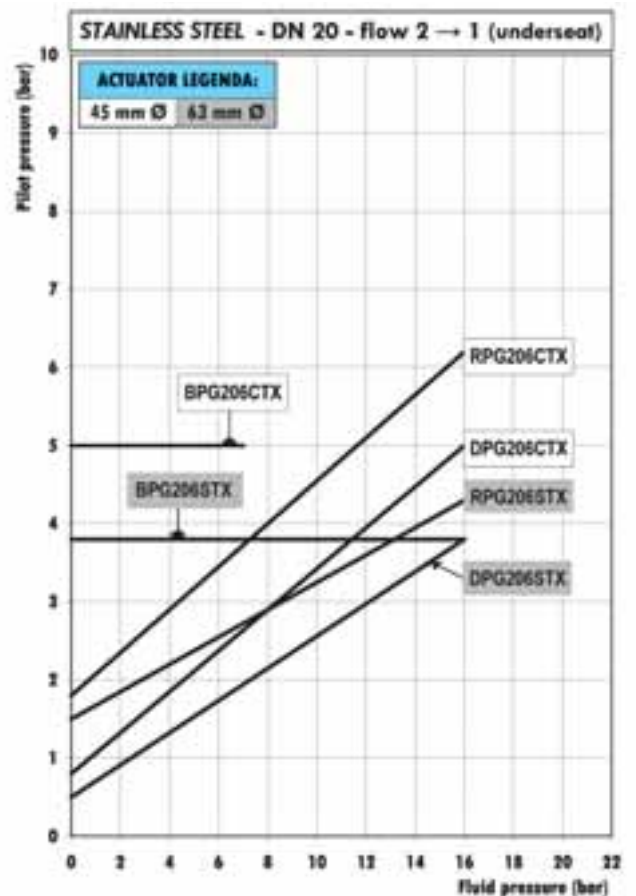
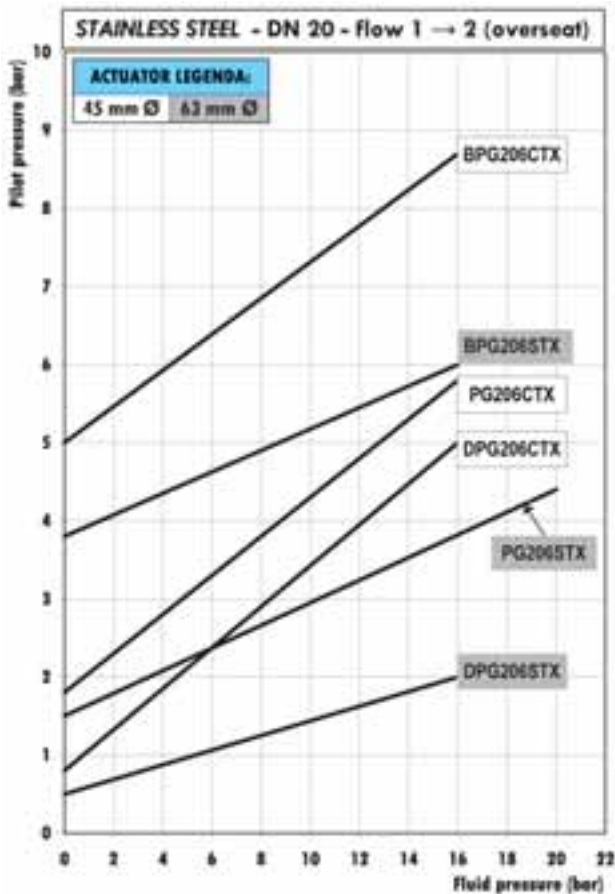
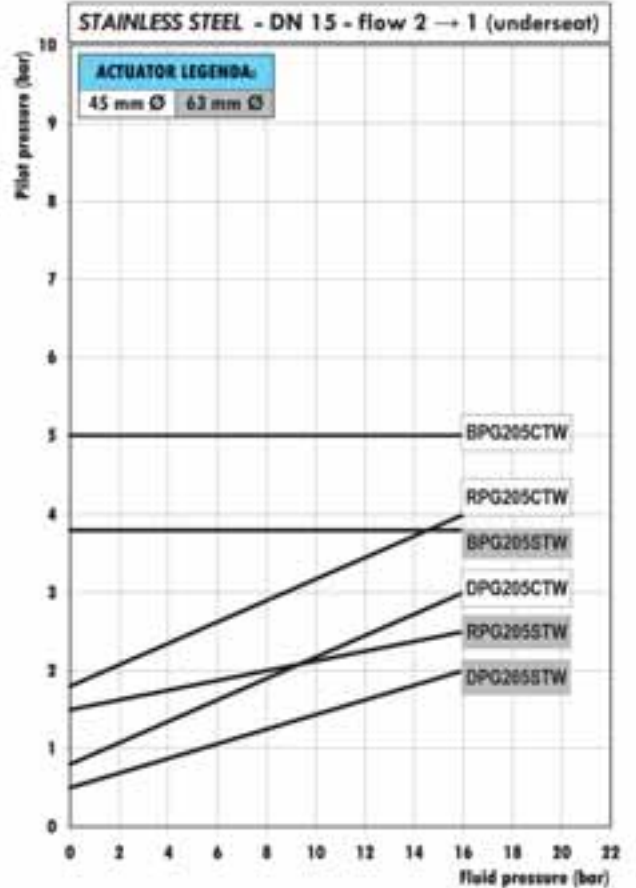
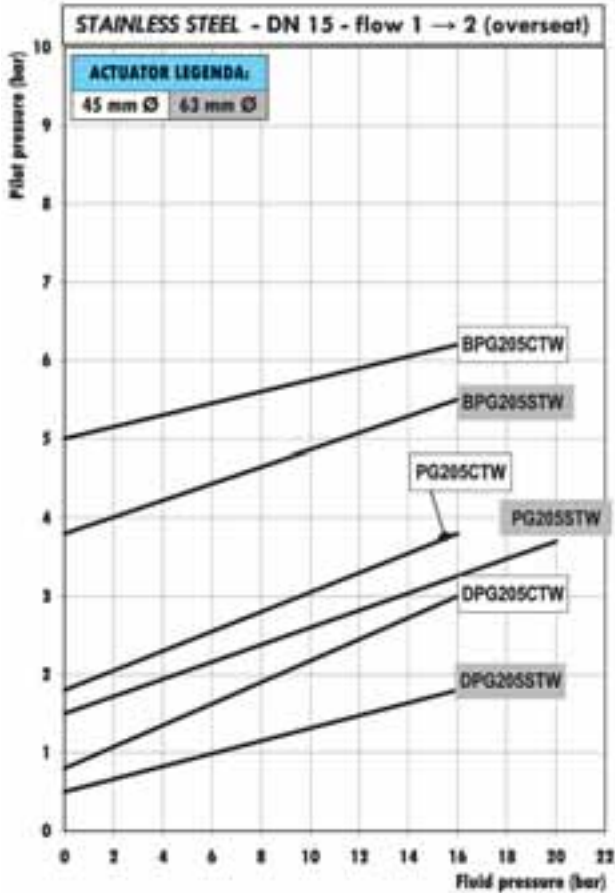
BRONZE VALVES SELECTION CHART DN40-DN50



MODEL LEGENDA:

CG = NORMALLY CLOSED	BCG = NORMALLY CLOSED (ANTI-WATERHAMMER)	RCG = NORMALLY OPEN	DCG = DOUBLE EFFECT
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STAINLESS STEEL VALVES SELECTION CHART DN15-DN20



MODEL LEGENDA:

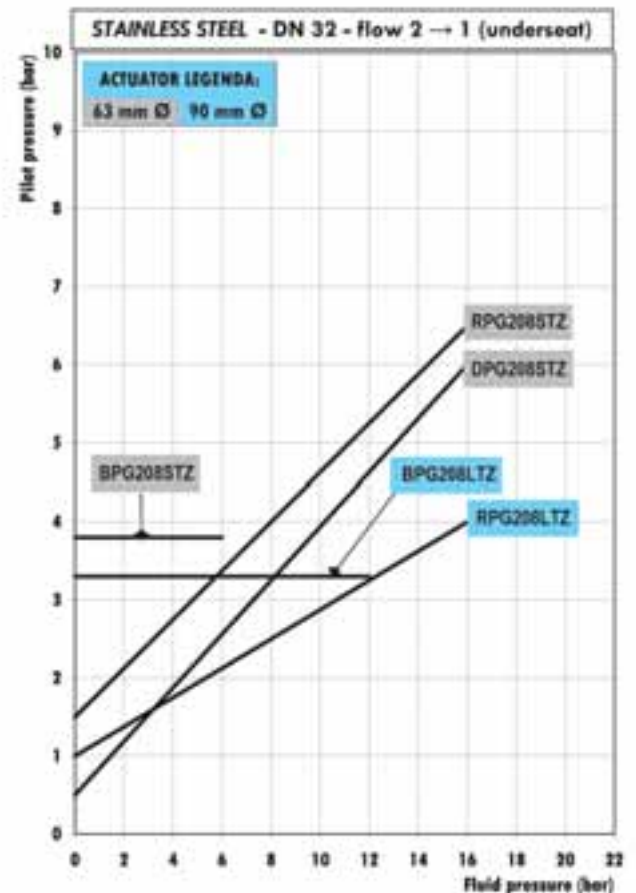
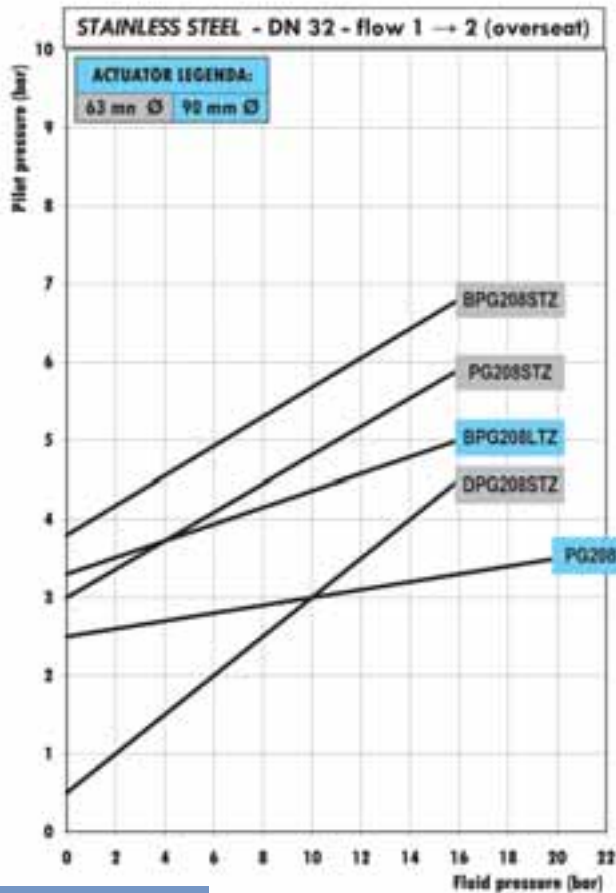
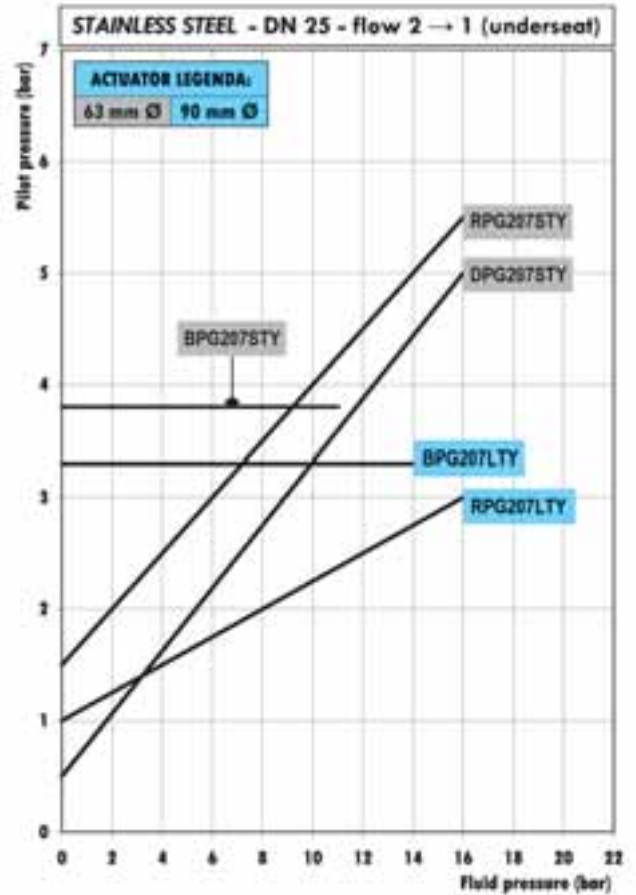
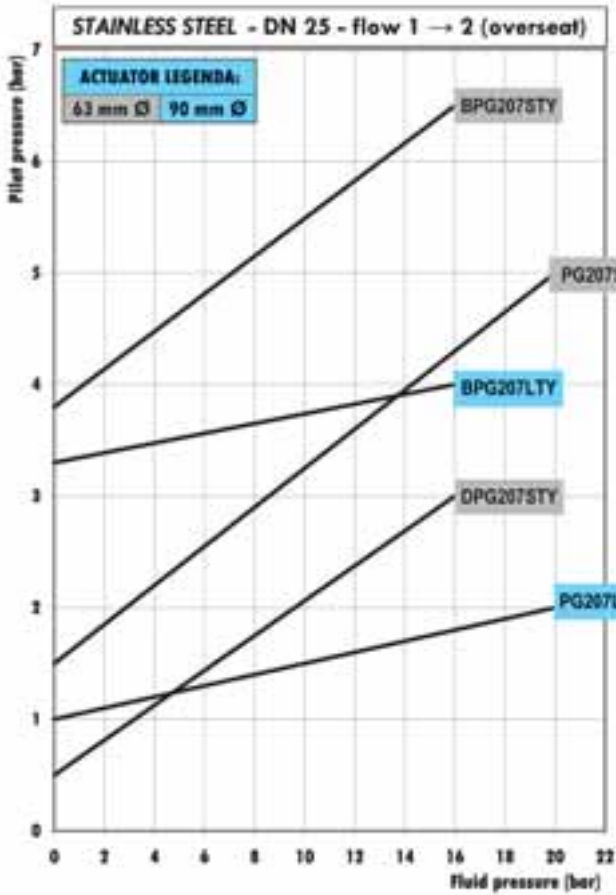
PG = NORMALLY CLOSED

BPG = NORMALLY CLOSED (ANTI-WATERHAMMER)

RPG = NORMALLY OPEN

DPG = DOUBLE EFFECT

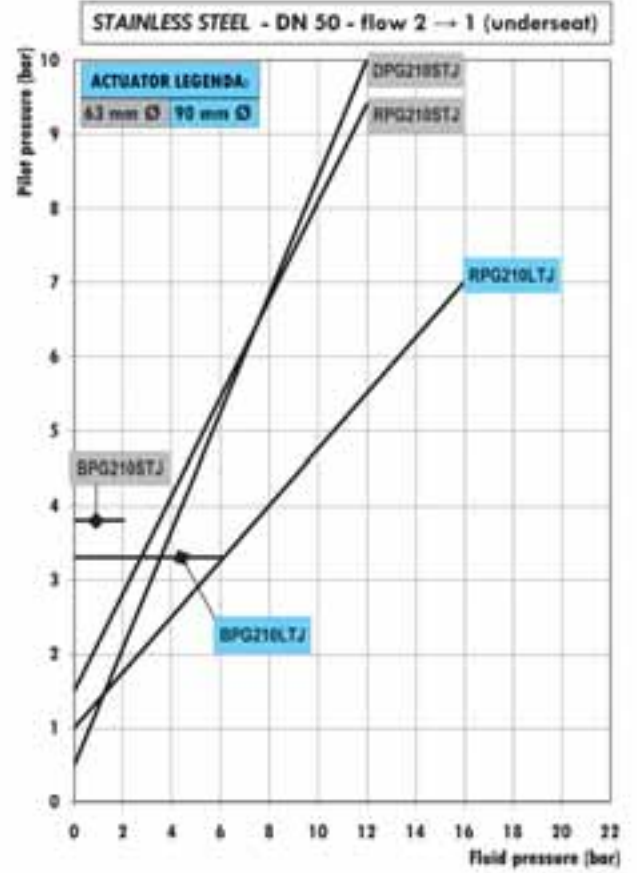
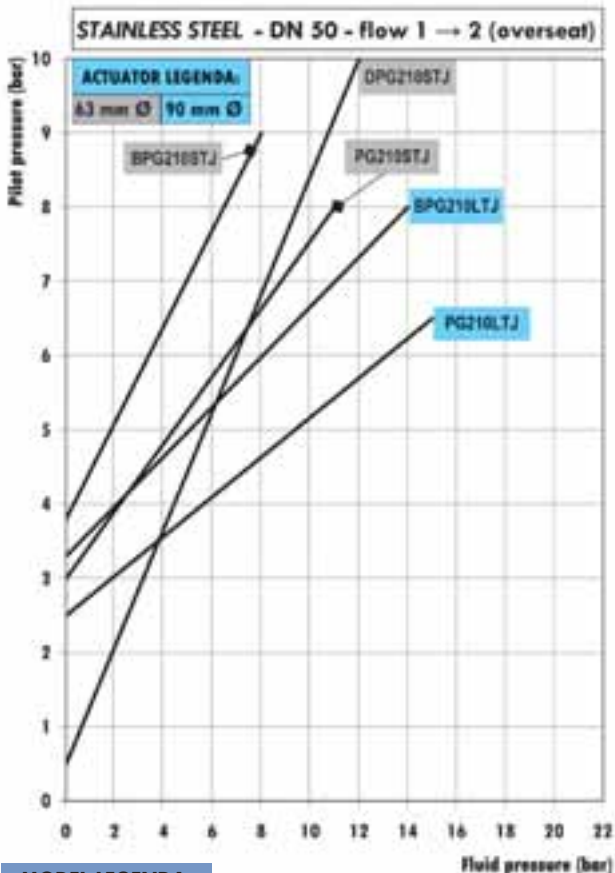
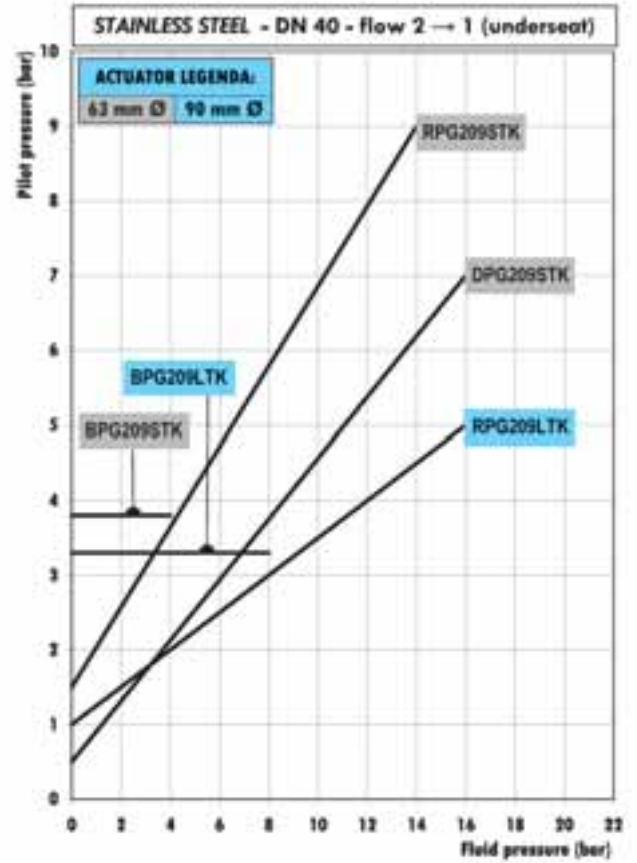
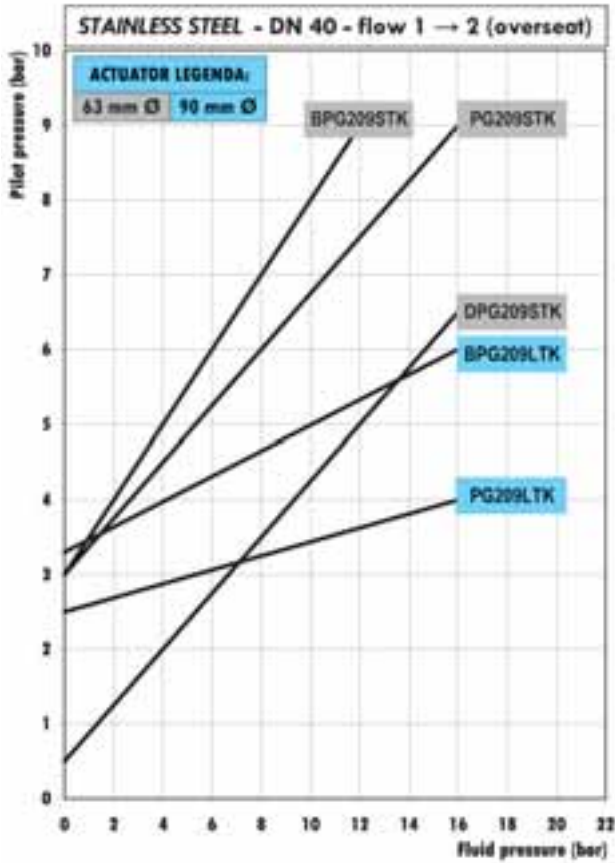
STAINLESS STEEL VALVES SELECTION CHART DN25-DN32



MODEL LEGENDA:

PG = NORMALLY CLOSED	BPG = NORMALLY CLOSED (ANTI-WATERHAMMER)	RPG = NORMALLY OPEN	DPG = DOUBLE EFFECT
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STAINLESS STEEL VALVES SELECTION CHART DN40-DN50



MODEL LEGENDA:

PG = NORMALLY CLOSED

BPG = NORMALLY CLOSED (ANTI-WATERHAMMER)

RPG = NORMALLY OPEN

DPG = DOUBLE EFFECT

TECHNICAL INFORMATION PAGE SHEET

For additional technical information please copy this page and fax it to us duly completed at no. +39 035 531763
We will be pleased to answer all of your queries.

✓ **Company**

.....

✓ **Name and position**

.....

✓ **Fax number**

.....

✓ **Function** NO NC BD DA

✓ **Connections**

.....

✓ **Media temperature**

.....

✓ **Media pressure**

nominal min. max.

✓ **Ambient temperature**

.....

✓ **Application**

.....

✓ **Sketches or Drawings**

✓ **Address**

.....

✓ **Telephone number**

.....

✓ **E-mail address**

.....

✓ **Operation** Underseat

Overseat

✓ **Controlled media**

.....

✓ **Pilot media / Pilot media pressure**

.....

✓ **Flow**

.....

✓ **Electrical supply** AC DC

Volts Frequency

Max. Power Consumption

✓ **Notes**

.....

.....

✓ **Valve presently in use** (brand / type)

.....

✓ **Annual quantity**

.....

✓ **Date**

.....

✓ **Signature**

.....

DECLARATION OF CONFORMITY TO CE

We, M&M International s.r.l. via Portico 17, Orio al Serio (BG), Italy,

declare under our sole responsibility that the products:

PISTON ACTUATED VALVES TYPE PG, CG, MG, CMG AND ALL DERIVED PRODUCTS

all product size from **DN15** to **DN50**

to which this declaration relates are in conformity with the following standard(s) or other normative document(s)

No harmonized or other technical standards are applicable to these products

following the provisions of 97/23/EC Pressure Equipment Directive

Product		Group 1 Gases	Group 2 Gases	Group 1 Liquids	Group 2 Liquids
CG/RCG/BCG/DCG/CMG	DN15-25 (PN25)	SEP	SEP	SEP	SEP
	DN32-40 (PN25)	-	SEP	SEP	SEP
	DN50 (PN16)	-	SEP	SEP	SEP
PG/RPG/BPG/DPG/MG	DN15-25 (PN40)	SEP	SEP	SEP	SEP
	DN32-40 (PN25)	1	SEP	SEP	SEP
	DN50 (PN16)	1	SEP	SEP	SEP

Orio al Serio, May 1st, 2002

M&M International s.r.l.
Managing Director

ATTENTION!

The attention of the specifier, purchaser, installer or user is drawn to special measures and limitations to use, which must be observed when the product is taken into service to maintain compliance with the above Directive. Details of these special measures and limitations to use are available on request and are also contained in the Installation, Maintenance and User's Instructions.

PISTON ACTUATED VALVE CODING

CODE: 1 2 3 4 5 6 7 8 9 10 11

FUNCTION:

- =	NC Normally close
B =	NC Bidirectional
R =	NO Normally open
D =	DA Double acting

SERIAL LETTER:

P =	Stainless Steel type
C =	Bronze / Brass type

CONNECTION TYPE:

A =	Flange (ANSI B 16.5 class 150)
B =	Butt Weld (ISO 65 - ANSI B 36.10)
C =	Clamp (ISO 2852)
D =	Flange (to BS 4504 - EN 1092 shape B)
G =	Gas (ISO 228)
H =	Butt Weld (ISO 4200)
N =	NPT (ISO 228)
S =	Socket Weld (ISO 65 - ANSI B 36.10)
O =	Pilot (w/out body)
W =	Butt Weld (DIN 11850)

WAYS:

2 =	2/2 Way
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VALVE BODY ID. CODE:

03 =	1/2" (Spec. x clamp)
05 =	1/2"
06 =	3/4"
07 =	1"
08 =	1 - 1/4"
09 =	1 - 1/2"
10 =	2"

SPECIAL EXECUTION:

0 =	Standard
V =	Vacuum seal (Bronze)
H =	High temperature (S.S.)

SPECIAL EXECUTION:

0 =	Standard
I =	Travel switch
M =	Manual override
R =	Flow regulator

ORIFICE (mm)

MARK	Ø
W =	15
X =	20
Y =	25
Z =	32
K =	40
J =	50

SEAL MATERIAL:

MARK	MATERIAL
T =	PTFE

ACTUATOR TYPE:

MARK	Ø
C =	45
S =	63
L =	90



spirax
/sarco *Engineering Group*

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E-mail: mm@mminternational.net
website: www.mminternational.net

cod. 170 050 0U0

A decorative graphic at the bottom of the page consisting of numerous thin, horizontal lines in various colors including red, orange, yellow, green, blue, and purple, creating a rainbow-like effect.