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CATVALV/0607IT

Pulse Valves

for dust collector filters



DUST FILTER COMPONENTS



TM



Certificate of Assessment

European Quality Assurance Limited
hereby grants to

Turbo S.r.l.

Via Po, 33/35
20031 Cesano Maderno
Milano, Italy

whose Quality Management System is in conformance with

ISO 9001:2000

the right to be listed in the Quality Register of Quality Assessed Companies
for the following scope(s)

Progettazione, produzione e commercializzazione di componenti per filtri depolveratori

Design, production and marketing of components for dust collector filters.

Signed

DIRECTOR / SCHEME MANAGER

on behalf of European Quality Assurance Limited

This Certificate of Assessment Number **5379** first issued on **23rd July 2004**

and is issued subject to the regulations, and within the accredited scope, of

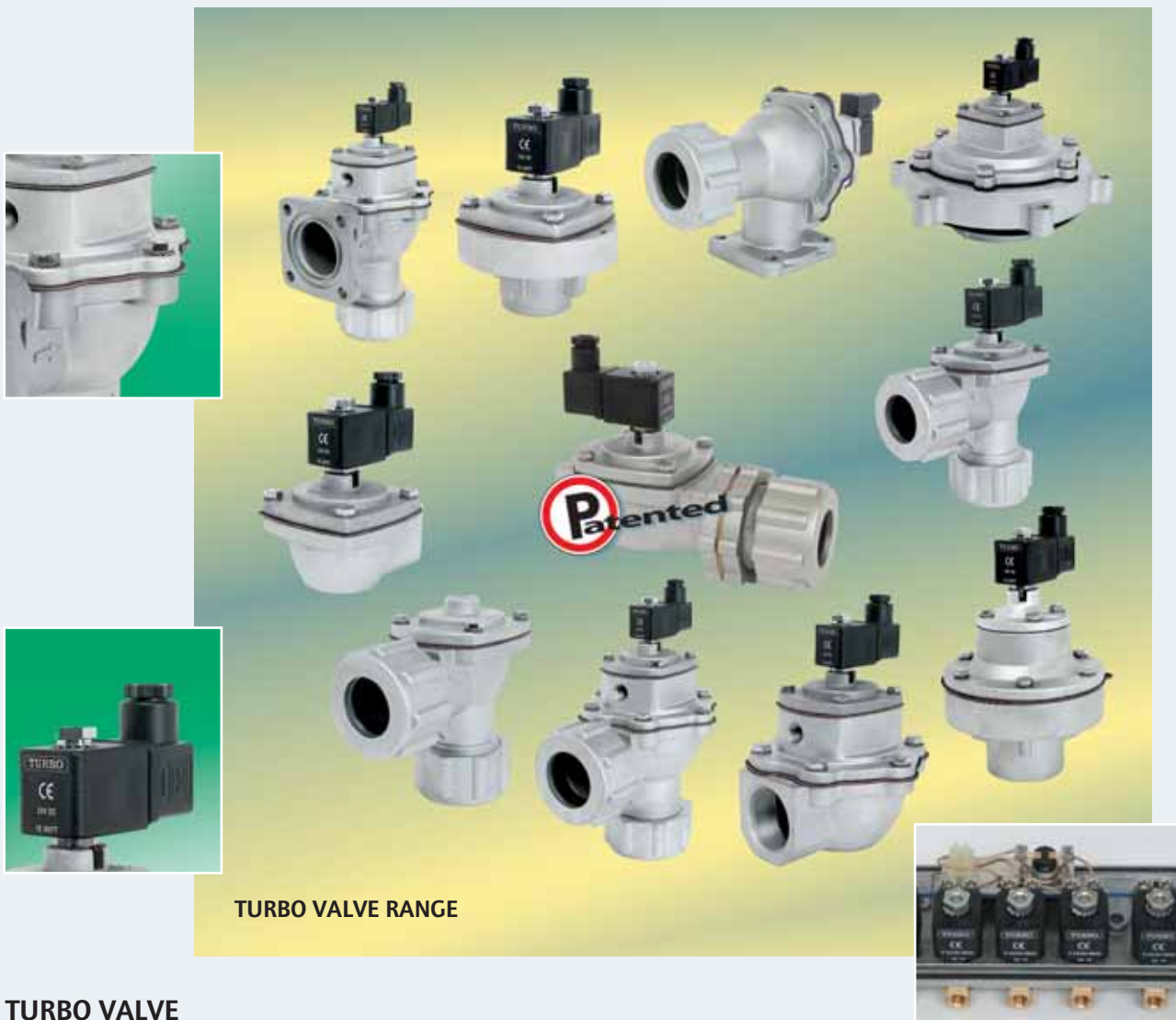
European Quality Assurance Limited
Navigation House, 48 Millgate
Newark, Nottinghamshire
NG24 4TY



Further clarification regarding the scope of this certificate and the applicability of ISO 9001:2000 requirements may be obtained by contacting EQA.
The use of the accreditation mark indicates no limitation in respect of those activities covered by the accreditation certificate number 47

EQA





TURBO VALVE

Turbo has a complete range of pulse valves for dust collector filters able to meet all customers technical requirement. Turbo pulse valves are design, with a flexible and long life diaphragm for a fast opening and closing operation.

Turbo products range includes:

- 1 - Threaded pulse valves
- 2 - Compression fittings pulse valves
- 3 - Flanged pulse valves
- 4 - Pulse valves for square tank
- 5 - Straight through pulse valves



Same valves are available in compliance with ATEX 94/9/EC:

ATEX II 2 GD (zone 1 e 21)
ATEX II 3 GD (zone 2 e 22).

PULSE VALVES

HOW TO ORDER

example

F P 25 02450

F : THREADED VALVE
D : COMPRESSION FITTINGS VALVE
E : FLANGED VALVE
SQ : GLOBAL VALVE FOR SQUARE TANK
FD : STRAIGHT THROUGH VALVE

P = INTEGRAL PILOT
M = REMOTE PILOT

CONNECTION DIAMETERS

$\frac{3}{4}$ " = 20
 1" = 25
 1 $\frac{1}{2}$ " = 40
 2" = 55
 2 $\frac{1}{2}$ " = 65
 3" = 75

STANDARD VOLTAGES

24V 50-60Hz = 02450
 110V 50-60Hz = 11050
 220V 50-60Hz = 22050
 24Vcc = 024DC

PULSE VALVES

**Range**

- B1 Pulse valve with threaded connection
- B2 Pulse valves with compression fitting
- B3 Pulse valves with flange inlet
- B4 Pulse valves for square tank
- B5 Pulse vale straight through

F Series**D Series****E Series****SQ Series****FD Series**

B1 **THREADED PULSE VALVE**

F Series

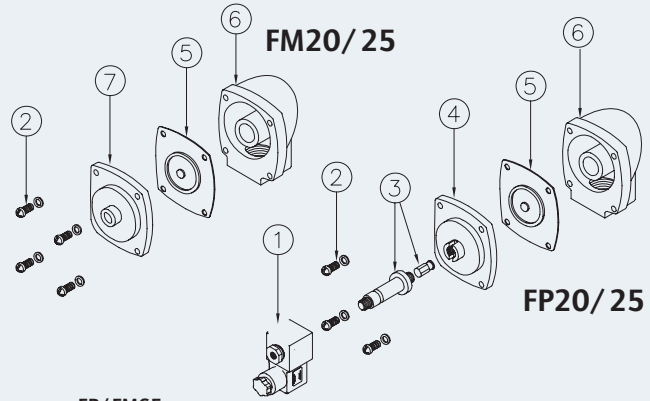


CHARACTERISTICS

Fluid	Filtered and oilfree compressed air
Temperature range	STD Nitril diaphragm -40°C; +80°C Viton diaphragm -30°C; +200°C
Operating pressure	min. 0,5; max 7,5 bar
Body e cover	Die cast aluminium
Core tube	Stainless Steel
Plunger	Stainless Steel
Screws	Stainless Steel
Coil insulation	Class H
Connector	PG 9; IP65 DIN 43650 ISO 4400
Standard voltage	230 -110 - 24V / 50-60VHz 19 VA 24VDC 15W

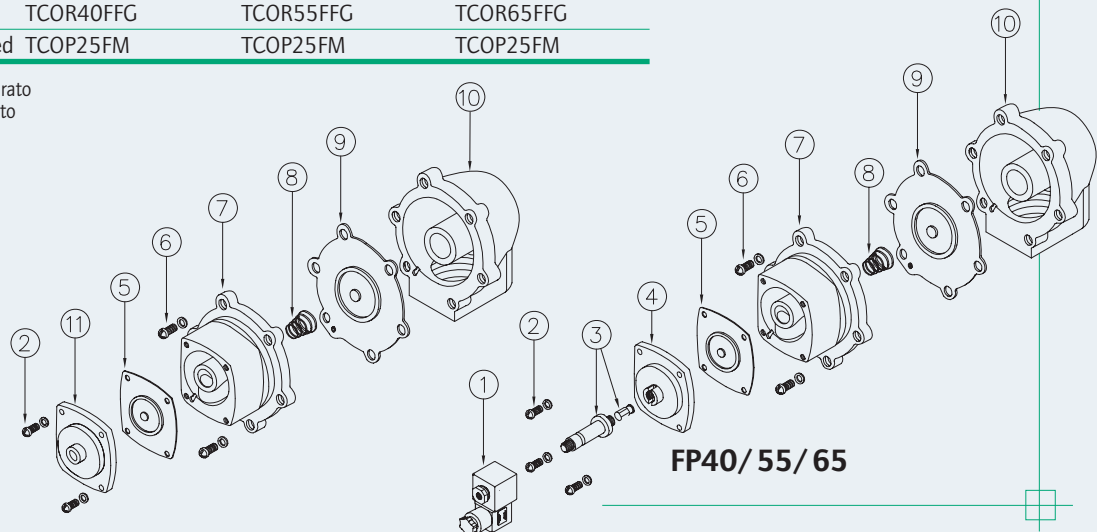
DESCRIPTION	FP/ FM20	FP/ FM25
1 Coil+Connector	BH10...V/50-60Hz	BH10...V/50-60Hz
2 Screws+Washer	VTE6x18+VROS6	VTE6x18+VROS6
3 Pole assembly	GPC 10	GPC 10
4 Cover	TCOP 25	TCOP 25
5 Diaphragm	M25	M25
6 Body	TCOR20FFG	TCOR20FFG
7 Cover remote operated	TCOP25FM	TCOP25FM

FP Versione con pilota integrato
FM Versione con pilota remoto



DESCRIPTION	FP/ FM40	FP/ FM55	FP/ FM65
1 Coil+Connector	BH10...V/50-60Hz	BH10...V/50-60Hz	BH10...V/50-60Hz
2 Screws+Washer	VTE6x20+VROS6	VTE6x20+VROS6	VTE6x20+VROS6
3 Pole assembly	GPC 10	GPC 10	GPC 10
4 Cover	TCOP 25	TCOP 25	TCOP 25
5 Diaphragm	M25	M25	M25
6 Screws + Washer	VTE8x20+VROS8	VTE10x25+VROS10	VTE10x25+VROS10
7 Main cover	TCOP 40	TCOP 65G	TCOP 65G
8 Spring	TMOL40	TMOL40	TMOL40
9 Main diaphragm	M40	M55	M75
10 Body	TCOR40FFG	TCOR55FFG	TCOR65FFG
11 Cover remote operated	TCOP25FM	TCOP25FM	TCOP25FM

FP Versione con pilota integrato
FM Versione con pilota remoto



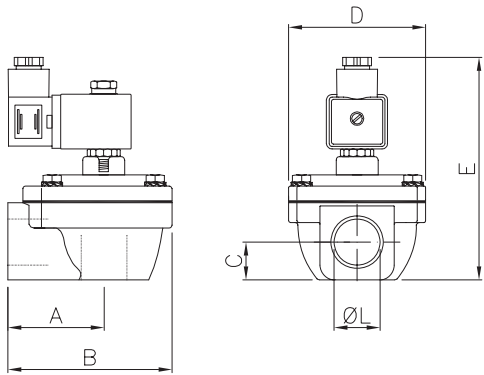
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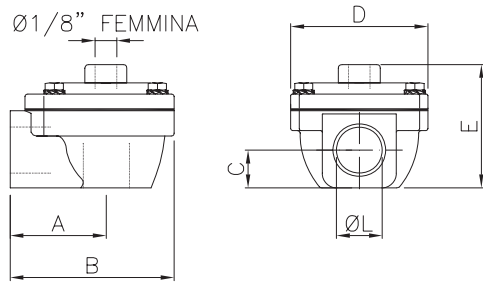
THREADED PULSE VALVE B1

Dimension mm F Series

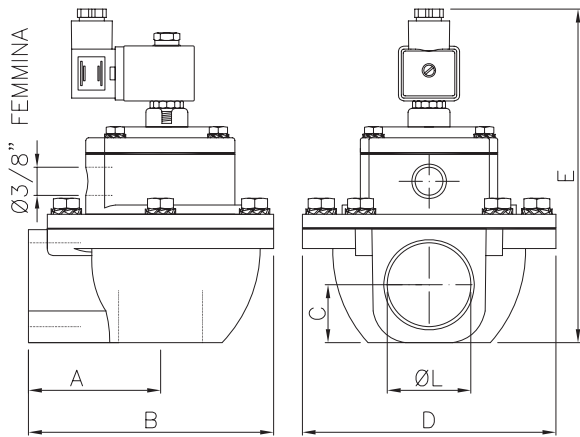
FP20 - FP25



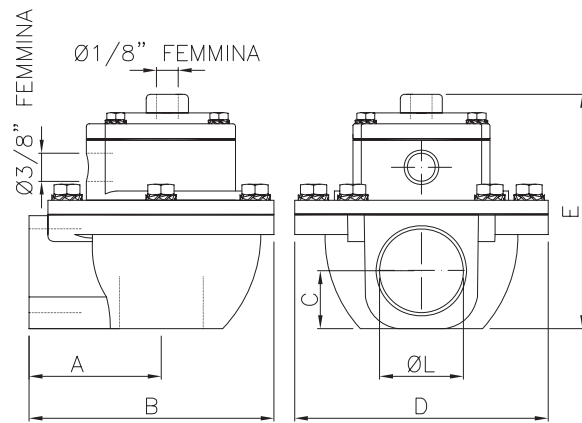
FM20 - FM25



FP40 - FP55 - FP65



FM40 - FM55 - FM65



Model	Ø L (nom)	A	B	C	D	E	Weight (Kg)	Model	E	Weight (Kg)
FP 20	$3/4''$	52	90	20,5	74	~125	0,6	FM 20	67	0,4
FP 25	1"	52	90	20,5	74	~125	0,5	FM 25	67	0,4
FP 40	$1\ 1/2''$	71,3	135	31	140	~188	1,6	FM 40	130	1,4
FP 55	2"	114	203	40	194	~225	3,5	FM 55	167	3,4
FP 65	$2\ 1/2''$	114	203	48	194	~225	3,4	FM 65	167	3,2

B2 COMPRESSION FITTING PULSE VALVE

D Series



CARACTERISTICS

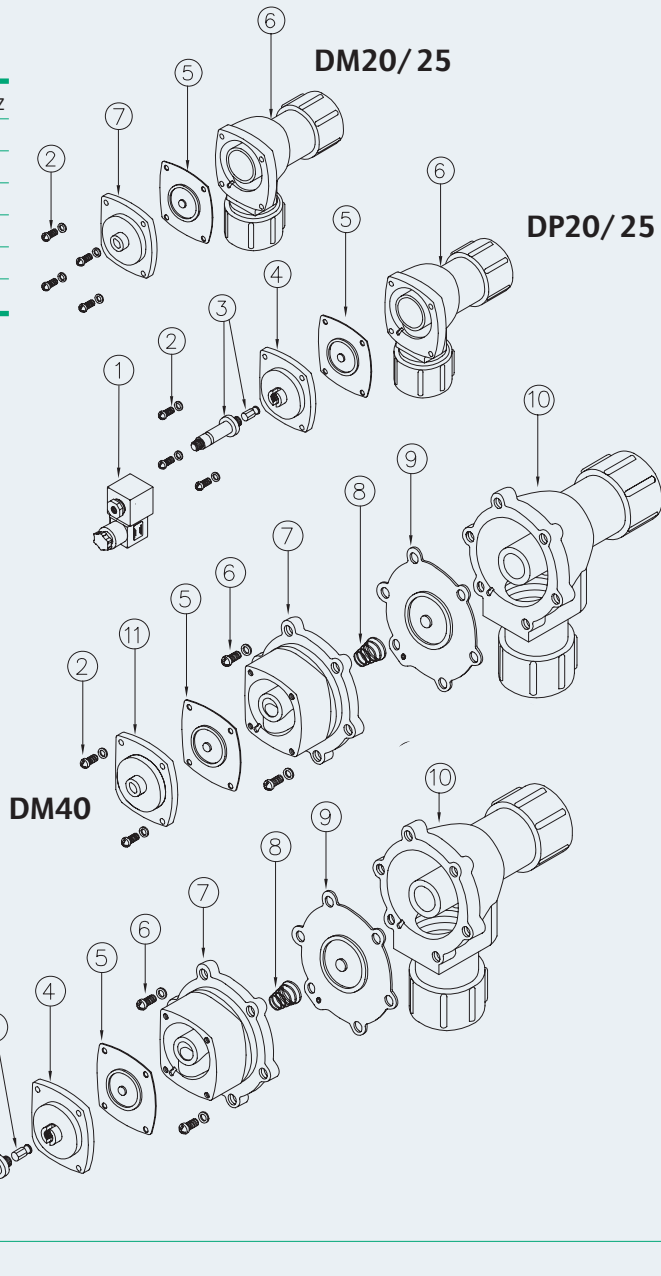
Fluid	Filtered and oilfree compressed air
Temperature range	STD Nitril diaphragm -40°C; +80°C Viton diaphragm -30°C; +200°C
Operating pressure	min. 0,5; max 7,5 bar
Body e coover	Die cast aluminium
Core tube	Stainless Steel
Plunger	Stainless Steel
Screws	Stainless Steel
Coil insulation	Class H
Connector	PG 9; IP65 DIN 43650 ISO 4400
Standard voltages	230 -110 - 24V / 50-60VHz 19 VA 24VDC 15W

DESCRIPTION	DP/DM20	DP/DM25
1 Coil+Connector	BH10...V/50-60Hz	BH10...V/50-60Hz
2 Screws+Washer	VTE6x18+VROS6	VTE6x18+VROS6
3 Pole assembly	GPC 10	GPC 10
4 Cover	TCOP 25	TCOP 25
5 Diaphragm	M20	M25
6 Body	TCOR20/25MMG	TCOR25MMG
7 Cover remote operated	TCOP25FM	TCOP25FM

DP Versione con pilota integrato
DM Versione con pilota remoto

DESCRIPTION	DP/DM40
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x20+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP 25
4 Remote cover	TCOP25FM
5 Diaphragm	M25
6 Screws + Washer	VTE8x20+VROS8
7 Main cover	TCOP 40N
8 Spring	TMOL40
9 Main diaphragm	M40
10Body	TCOR40MMG
11Cover remote operated	TCOP25FM

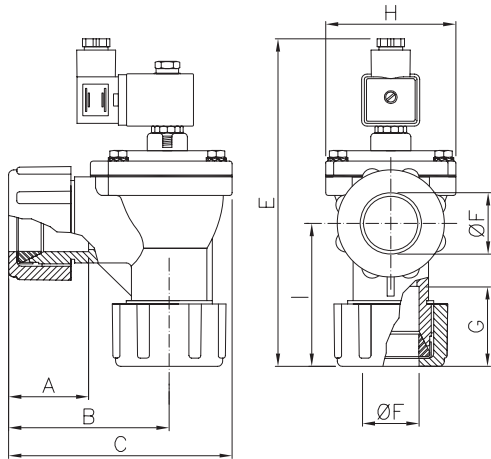
DP Versione con pilota integrato
DM Versione con pilota remoto



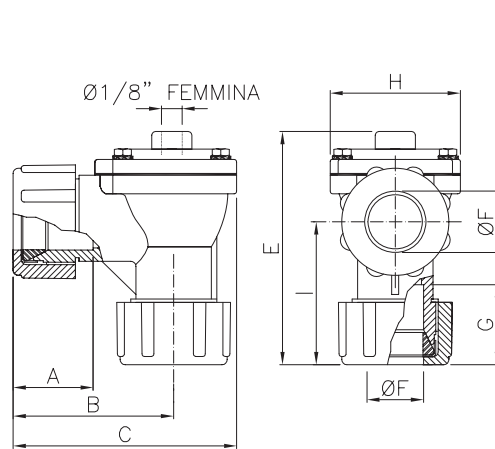
COMPRESSION FITTING PULSE VALVE **B2**

Dimensions mm **D** Series

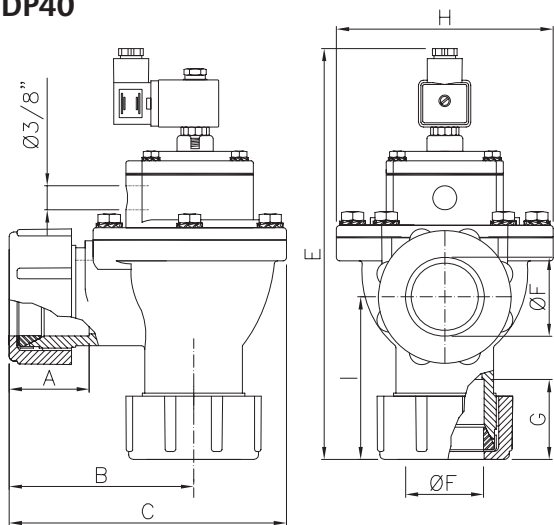
DP20 - DP25



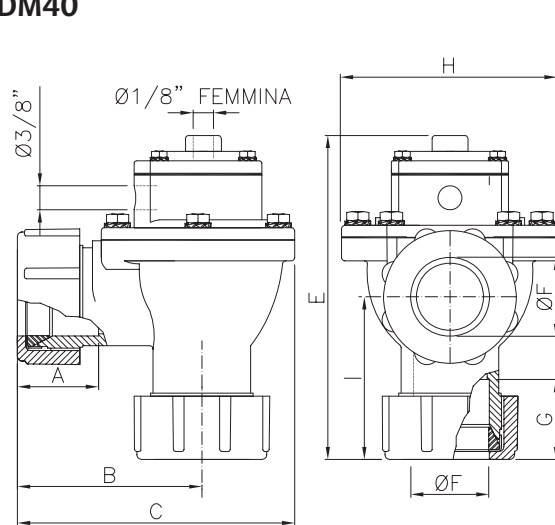
DM20 - DM25



DP40



DM40



Le quote A, B, C, variano con lo schiacciamento della guarnizione conica

Model	Ø(nom)	A	B	C	E	F	G	H	I	L	Weight (Kg)	Model	E	Weight (Kg)
DP 20	3/4"	48	90	128	~189	28,5	48	74	80	30,5	1,1	DM 20	131	1
DP 25	1"	48	90	128	~189	35	48	74	80	30,5	1	DM 25	131	0,9
DP 40	1 1/2"	66	114	180	~264	50	66	140	101	39	2,4	DM 40	206	2,3

B3 FLANGED PULSE VALVES

E Series



CARACTERISTICS

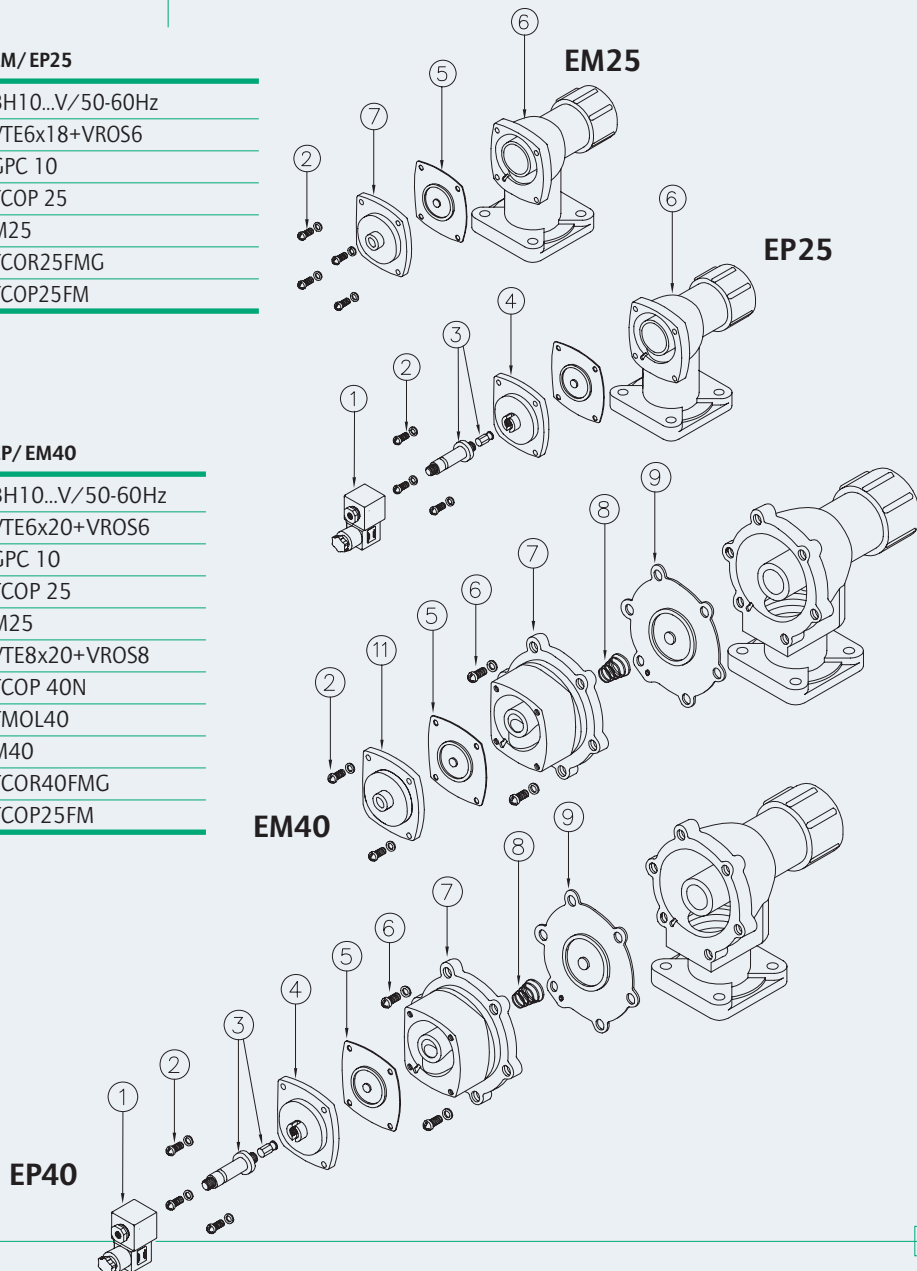
Fluid	Filtered and oilfree compressed air
Temperature range	STD Nitril diaphragm -40°C; +80°C Viton diaphragm -30°C; +200°C
Operating pressure	min 0,5; max 7,5 bar
Body & cover	Die cast aluminium
Core tube	Stainless Steel
Plunger	Stainless Steel
Screws	Stainless Steel
Coil insulation	Class H
Connector	PG 9; IP65 DIN 43650 ISO 4400
Standard voltages	230 -110 - 24V / 50-60VHz 19 VA 24VDC 15W

DESCRIPTION	EM/EP25
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x18+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP 25
5 Diaphragm	M25
6 Body	TCOR25FMG
7 Cover remote operated	TCOP25FM

EP Versione con pilota integrato
EM Versione con pilota remoto

DESCRIPTION	EP/EM40
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x20+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP 25
5 Diaphragm	M25
6 Screws + Washer	VTE8x20+VROS8
7 Main cover	TCOP 40N
8 Spring	TMOL40
9 Main diaphragm	M40
10 Body	TCOR40FMG
11 Cover remote operated	TCOP25FM

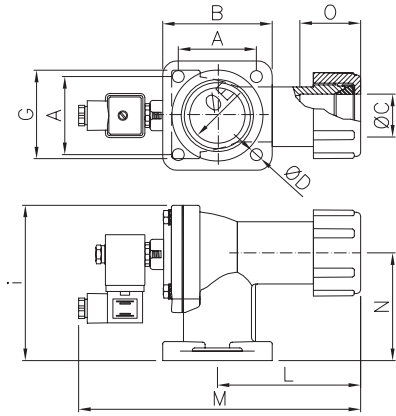
EP Versione con pilota integrato
EM Versione con pilota remoto



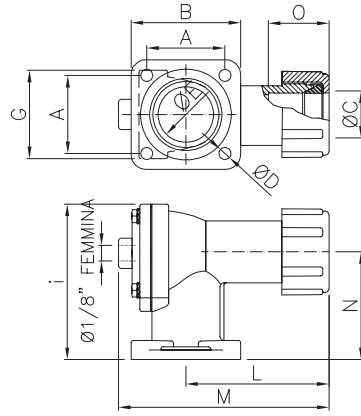
FLANGED PULSE VALVE **B3**

Dimensions mm **E** Series

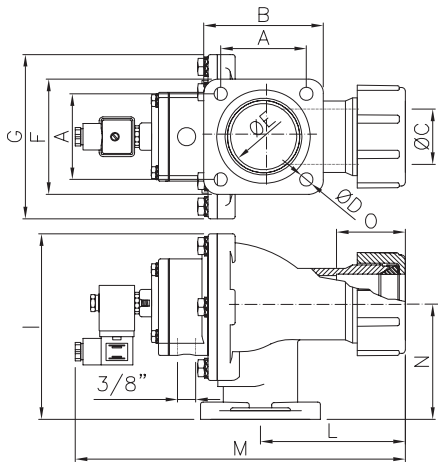
EP25



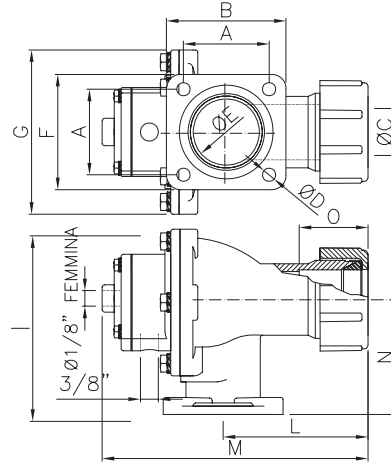
EM25



EP40



EM40



Model	$\varnothing C$ (nom)	A	B	$\varnothing D$	F	G	I	L	M	N	$\varnothing E$	Weight (Kg)
EP 25	1"	60	82	9	82	74	119	106	217	81	1 ¹ / ₂	1
EP 40	1 ¹ / ₂ "	72	99	11	96	140	160	115	278	96	2"	2,3
EM 25	1"	60	82	9	82	74	106	106	159	81	1 ¹ / ₂	0,9
EM40	1 ¹ / ₂ "	72	99	11	96	140	160	115	220	96	2"	2,1

B4 GLOBAL PULSE VALVES FOR SQUARE TANK

SQ Series Ø 1"



CARACTERISTICS

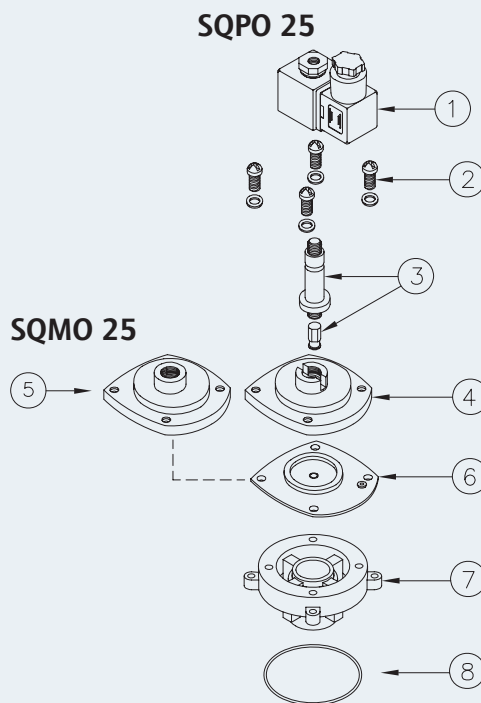
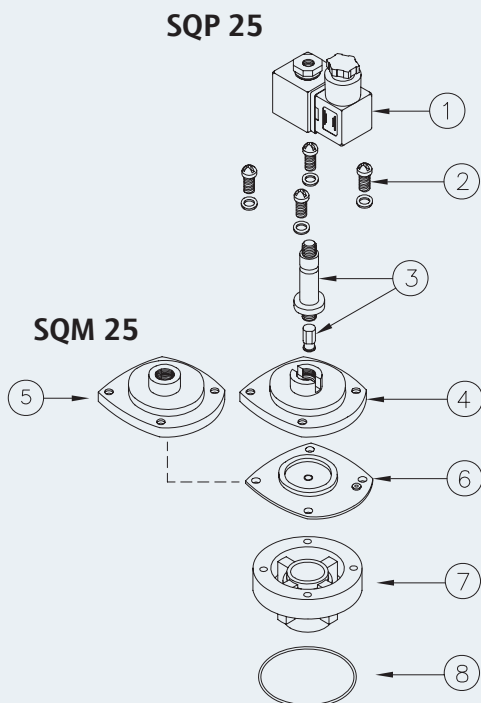
Fluid	Filtered and oilfree compressed air
Temperature range	STD Nitril diaphragm -40°C; +80°C Viton diaphragm -30°C; +200°C
Operating pressure	min 0,5; max 7,5 bar
Body & cover	Die cast aluminium
Core tube	Stainless Steel
Plunger	Stainless Steel
Screws	Stainless Steel
Coil insulation	Class H
Connector	PG 9; IP65 DIN 43650 ISO 4400
Standard voltages	230 -110 - 24V / 50-60VHz 19 VA 24VDC 15W

DESCRIPTION	SQP25/SQM25
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x18+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP 25
5 Cover remote operated	TCOP25FM
6 Diaphragm	M25
7 Body	TCOR25IM
8 O-Ring	OR 65x4

SQP Versione con pilota integrato
SQM Versione con pilota remoto

DESCRIPTION	SQP025/SQM025
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x18+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP 25
5 Cover remote operated	TCOP25FM
6 Diaphragm	M25
7 Body	TCOR25IMO
8 O-Ring	OR 65x4

SQPO Versione con pilota integrato
SQMO Versione con pilota remoto

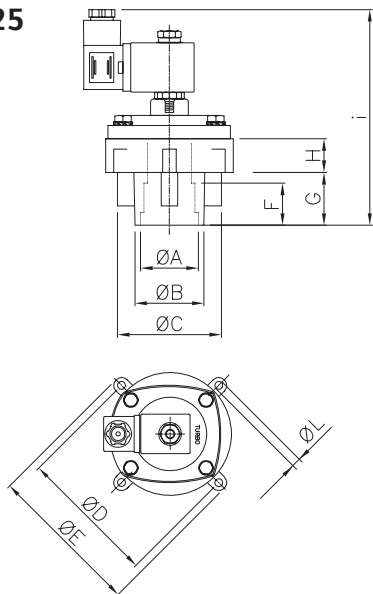


GLOBAL PULSE VALVE FOR SQUARE TANK

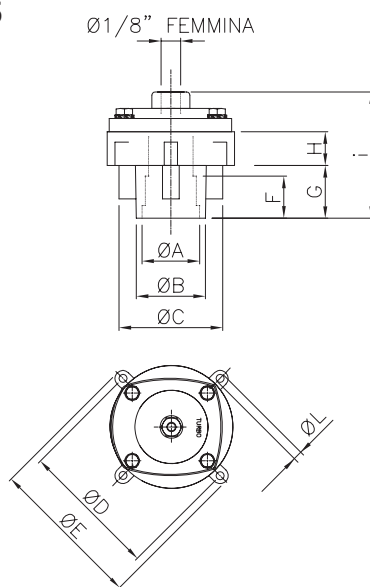
B4

Dimensions mm **SQ** Series

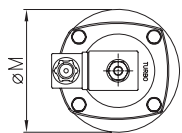
SQPO 25



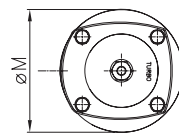
SQMO 25



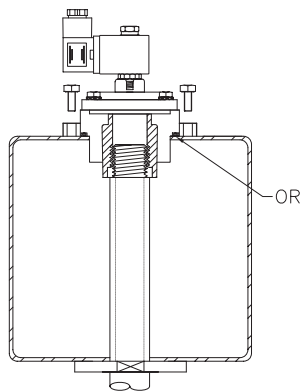
SQP 25



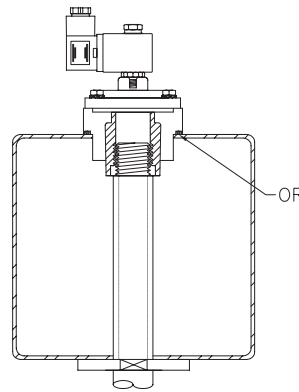
SQM 25



Installation SQPO 25/ SQMO 25



Installation SQP 25/ SQM 25



Model	Ø A	Ø B	Ø C	Ø D	Ø E	Ø M	F	G	H	I	Ø L	Weight (Kg)
SQPO 25	1"	41,4	62,2	104	116	92	25	31,5	20,2	136	6,2	0,6
SQMO 25	1"	41,4	62,2	104	116	92	25	31,5	20,2	78	6,2	0,5
SQP 25	1"	41,4	62,2	104	116	92	25	31,5	20,2	136	-	0,6
SQM 25	1"	41,4	62,2	104	116	92	25	31,5	20,2	78	-	0,5

B4 GLOBAL PULSE VALVES FOR SQUARE TANK

SQ Series Ø 1"1/2

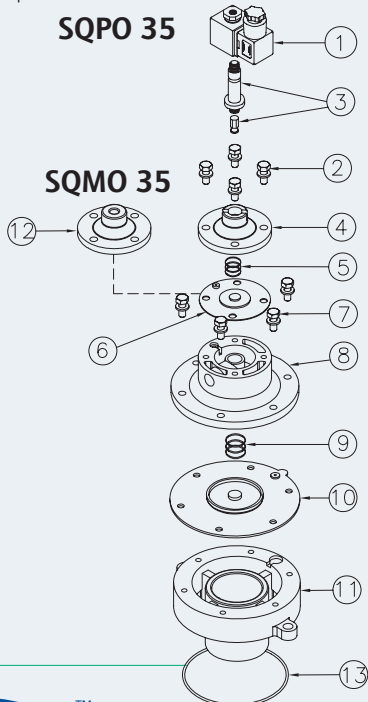


CARACTERISTICS

Fluid	Filtered and oilfree compressed air
Temperature range	STD Nitril diaphragm -40°C; +80°C Viton diaphragm -30°C; +200°C
Operating pressure	min. 0,5; max 7,5 bar
Body & cover	Die cast aluminium
Core tube	Stainless Steel
Plunger	Stainless Steel
Screws	Stainless Steel
Coil insulation	Class H
Connector	PG 9; IP65 DIN 43650 ISO 4400
Standard voltages	230 -110 - 24V / 50-60VHz 19 VA 24VDC 15W

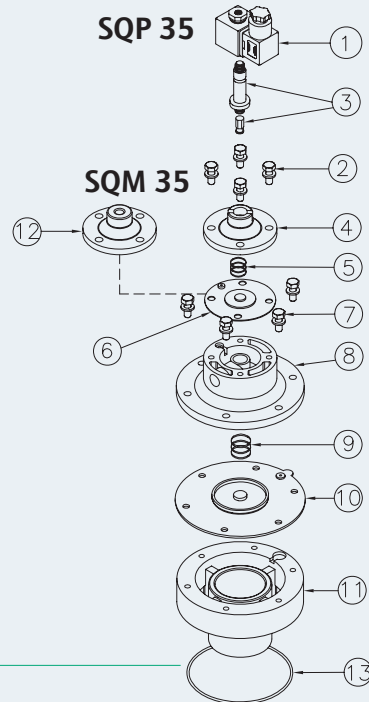
DESCRIPTION	SQP035/SQM035
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x18+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP 10
5 Spring	TMOL25
6 Diaphragm	M10
7 Screws+Washer	VTE8x20+VROS8
8 Main cover	TCOP35N
9 Spring	TMOL40
10 Main diaphragm	M35-S
11 Body	TCOR35FMGS
12 Cover remote operated	TCOP10FM
13 O-Ring	OR 6337

SQPO Versione con pilota integrato
SQMO Versione con pilota remoto



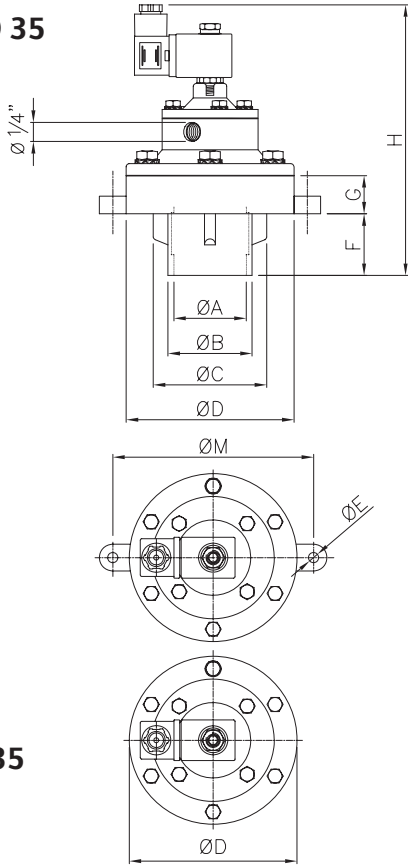
DESCRIPTION	SQP35/SQM35
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x18+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP 10
5 Spring	TMOL25
6 Diaphragm	M10
7 Screws+Washer	VTE8x20+VROS8
8 Main cover	TCOP35N
9 Spring	TMOL40
10 Main diaphragm	M35-S
11 Body	TCOR35FMG
12 Cover remote operated	TCOP10FM
13 O-Ring	OR 6337

SQP Versione con pilota integrato
SQM Versione con pilota remoto

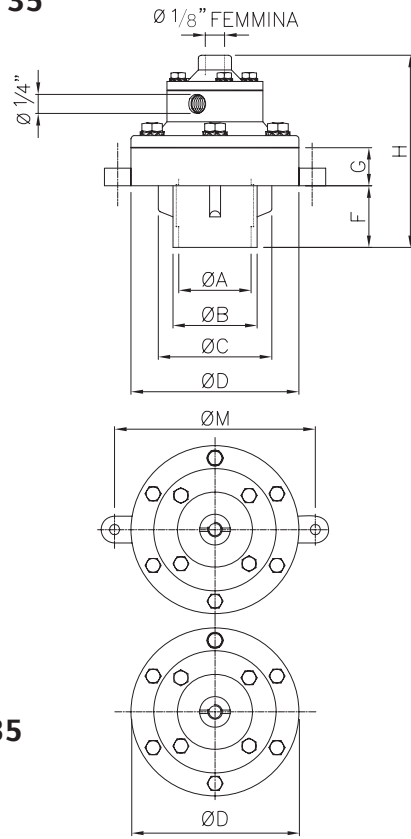


Dimensions $\varnothing 1\frac{1}{2}$ **SQ** Series

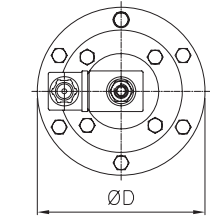
SQPO 35



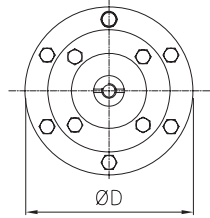
SQMO 35



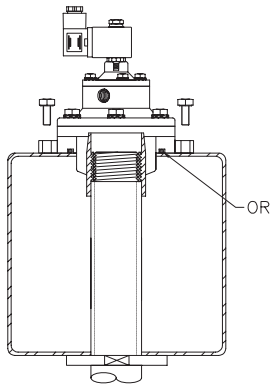
SQP 35



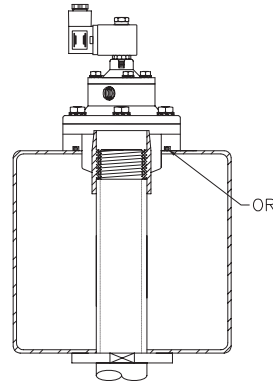
SQM 35



Installation SQPO 35



Installation SQMO 35



Model	$\varnothing A$	$\varnothing B$	$\varnothing C$	$\varnothing D$	$\varnothing E$	F	G	H	$\varnothing M$	Weight (Kg)
SQPO 35	$1\frac{1}{2}$	57	80,4x70,3	114	9	42	26	162	130	1,3
SQMO 35	$1\frac{1}{2}$	57	80,4x70,3	114	9	42	26	104	130	1,1
SQP 35	$1\frac{1}{2}$	57	80,4x70,3	114	9	42	26	162	130	1,3
SQM 35	$1\frac{1}{2}$	57	80,4x70,3	114	9	42	26	104	130	1,1

B4 GLOBAL PULSE VALVE FOR SQUARE TANK

SQ Series Ø 2" - 2"1/2 - 3" - 4"



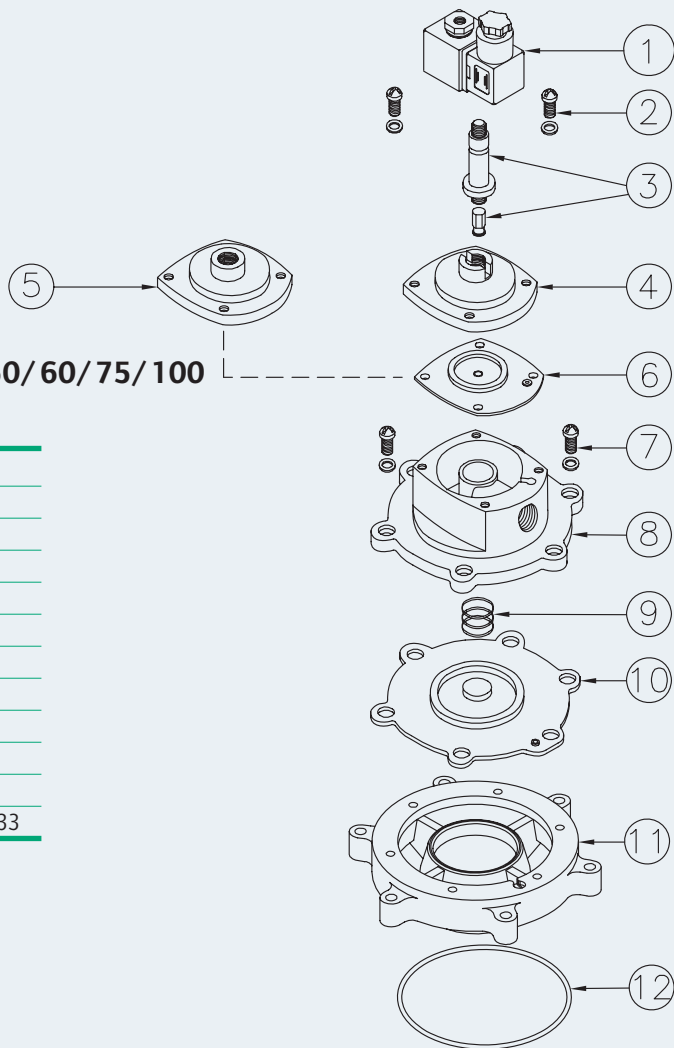
CHARACTERISTICS

Fluid	Filtered and oilfree compressed air
Temperature range	STD Nitril diaphragm -40°C; +80°C Viton diaphragm -30°C; +200°C
Operating pressure	min. 0,5; max 7,5 bar
Body & cover	Die cast aluminium
Core tube	Stainless Steel
Plunger	Stainless Steel
Screws	Stainless Steel
Coil insulation	Class H
Connector	PG 9; IP65 DIN 43650 ISO 4400
Standard voltages	230 -110 - 24V / 50-60VHz 19 VA 24VDC 15W

DESCRIPTION	SQP55/ 65
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x20+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP 25
5 Cover remote operate	TCOP25FM
6 Diaphragm	M25
7 Screws+Washer	VTE10x20+VROS10
8 Cover	TCOP50G
9 Spring	TMOL40
10 Main diaphragm	M50
11 Body	TCOR50FG - TCOR60FG
12 O-Ring	OR 133 35x5,33

DESCRIPTION	SQP75/ 100
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x18+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP 25
5 Cover remote operate	TCOP25FM
6 Diaphragm	M25
7 Screws+Washer	VTE10x25+VROS10
8 Cover	TCOP65G
9 Spring	TMOL40
10 Main diaphragm	M75
11 Body	TCOR75FLQ - TCOR100FLQ
12 O-Ring	OR 177 17x6,99 - OR 100 17x5,33

SQP 55/ 65/ 75/ 100



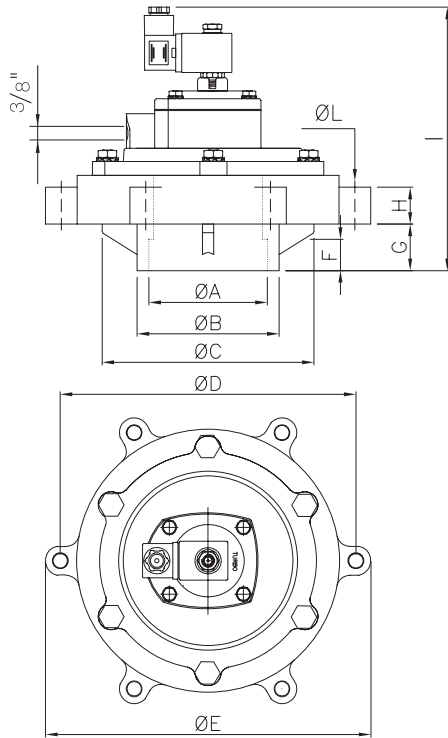
SQM 50/ 60/ 75/ 100

GLOBAL PULSE VALVE FOR SQUARE TANK

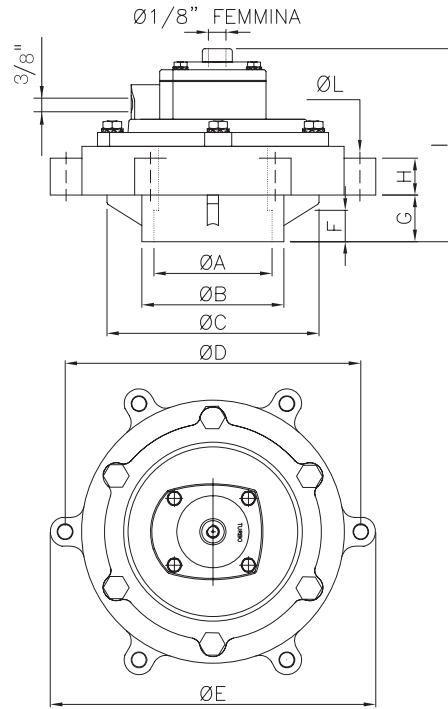
B4

Dimensions Ø 2" - 2"1/2 - 3" - 4" **SQ** Series

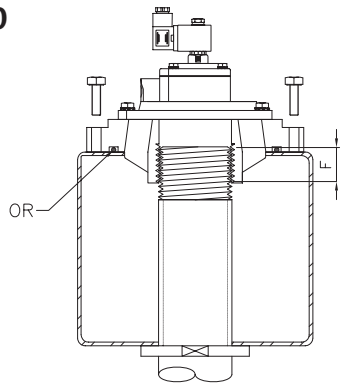
SQP 50/60/75/100



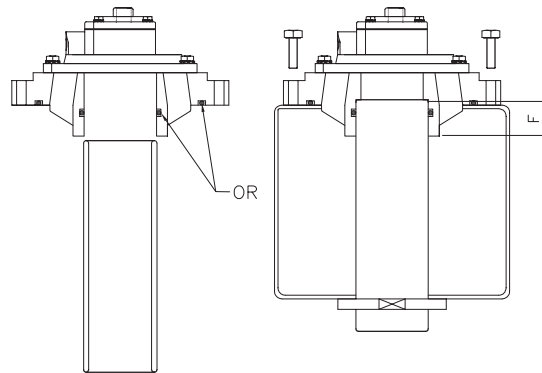
SQM 50/60/75/100



SQM 50/60
SQP 50/60



SQM 75/100 PUSH IN
SQP 75/100 PUSH IN



Model	Ø A	Ø B	Ø C	Ø D	Ø E	F	G	H	I	Ø L	Weight (Kg)
SQP 50	2"	83	126	175	195	39	60	20	211	11	2,4
SQP 60	2"1/2	83	126	175	195	39	60	20	211	11	2,2
SQP 75-IN	3"	107,5	161	225	247	44	35,5	27	206	11	3,6
SQP 100-IN	4" (101,6 mm)	119,5	161	225	247	44	35,5	27	206	11	3,5
SQM 50	2"	83	126	175	195	39	60	20	153	11	2,2
SQM 60	2"1/2	83	126	175	195	39	60	20	153	11	2
SQM 75-IN	3"	107,5	161	225	247	44	35,5	27	148	11	3,6
SQM 100-IN	4" (101,6 mm)	119,5	161	225	247	44	35,5	27	148	11	3,3



From



R. & D.
a new
pulse valve

Patented

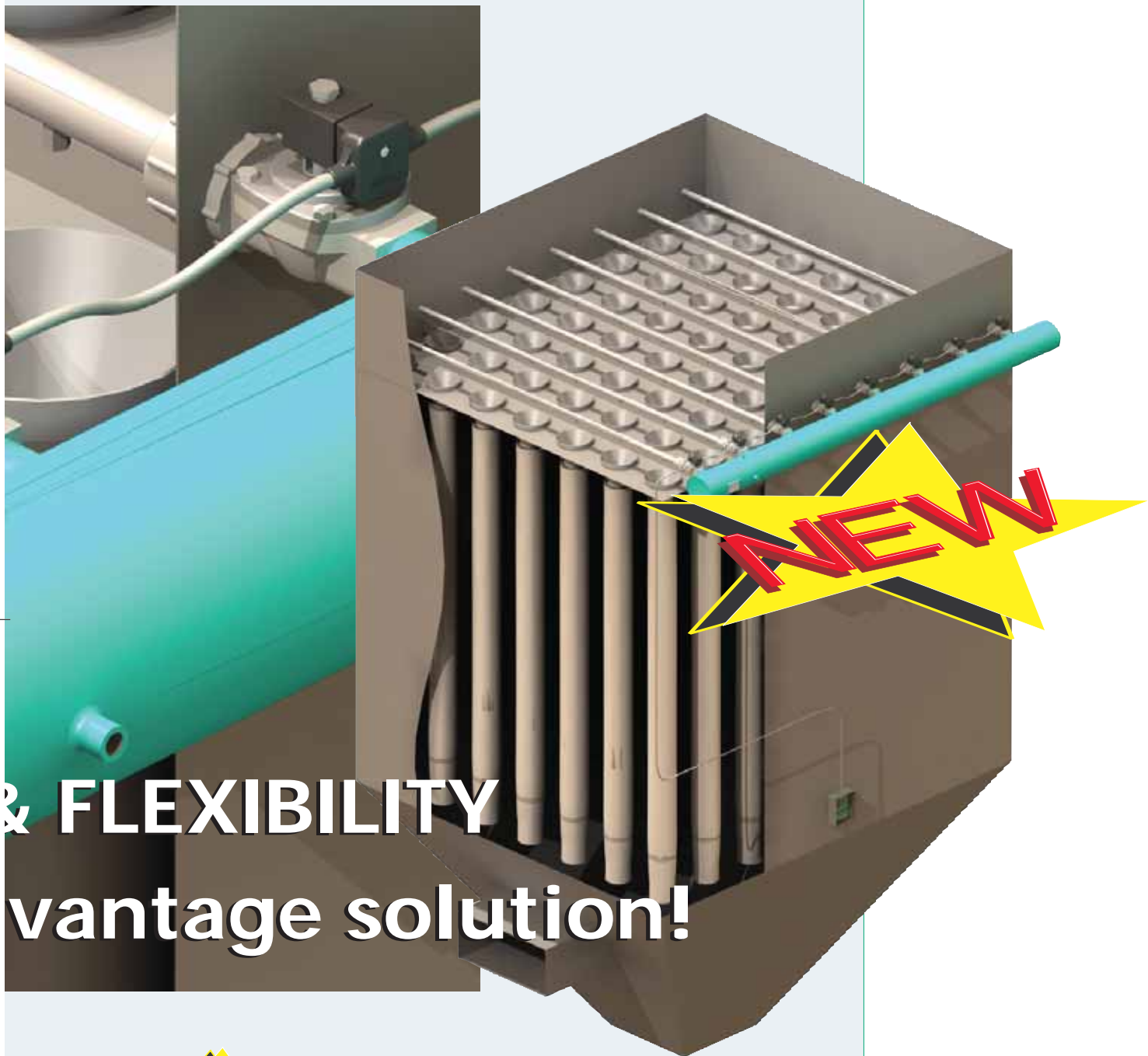
**SAVING &
The double adv**



THE DESIGN OFFER EASE
OF MAINTENANCE THANK
TO ORIZONTAL POSITION



INTEGRATED COMPRESSION FITTING
ELIMINATE BULRHEAD CONNECTOR



& FLEXIBILITY vantage solution!



**DIRECT INSTALLATION THROUGH
THE BAG HOUSE WALL**



**SAME COMPONENTS THROUGH ALL
TURBO PULSE VALVES RANGE**

B5 STRAIGHT THROUGH PULS VALVE

FD Series

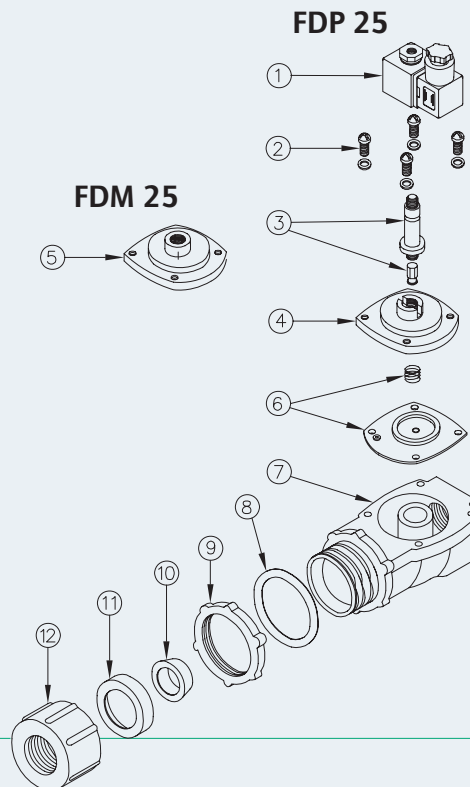
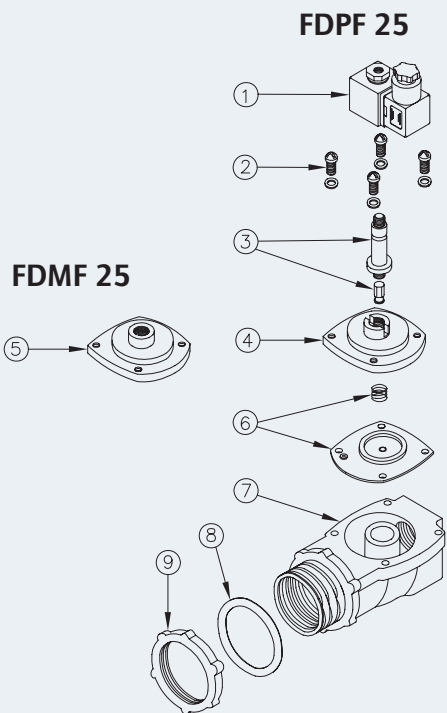


CARACTERISTICS

Fluid	Filtered and oilfree compressed air
Temperature range	STD Nitril diaphragm -40°C; +80°C Viton diaphragm -30°C; +200°C
Operating pressure	min. 0,5; max 7,5 bar
Body & cover	Die cast aluminium
Core tube	Stainless Steel
Plunger	Stainless Steel
Screws	Stainless Steel
Coill insulation	Class H
Connector	PG 9; IP65 DIN 43650 ISO 4400
Standard voltages	230 -110 - 24V / 50-60VHz 19 VA 24VDC 15W

DESCRIPTION	FDPF25/ FDMF25
1 Coil+Connector	BH10...V/50-60Hz7
2 Screws+Washer	VTE6x18+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP25
5 Cover remote operated	TCOP25FM
6 Diaphragm+Spring	M25+TMOL 10G
7 Body	TCOR25FLG
8 Gasket	TROND67x53x5
9 Lock nut	TGBA25

DESCRIPTION	FDP25/ FDM25
1 Coil+Connector	BH10...V/50-60Hz
2 Screws+Washer	VTE6x18+VROS6
3 Pole assembly	GPC 10
4 Cover	TCOP25
5 Cover remote operated	TCOP25FM
6 Diaphragm+Spring	M25+TMOL 10G
7 Body	TCOR25FLG/IN-OUT
8 Gasket	TROND67x53x5
9 Lock nut	TGBA25
10 Seal	GCON25
11 Seal retainer	OG25
12 Compression nut	TDAL25

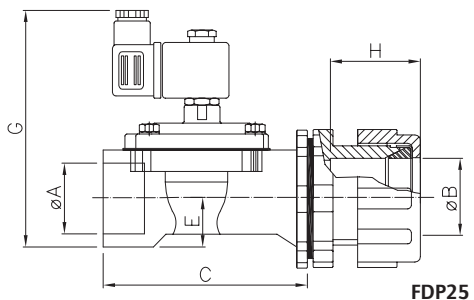


STRAIGHT THROUGH PULSE VALVE

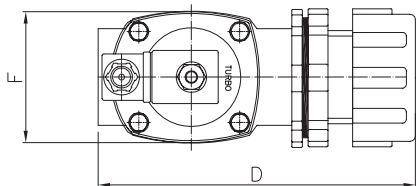
B5

Dimensions **FD** Series

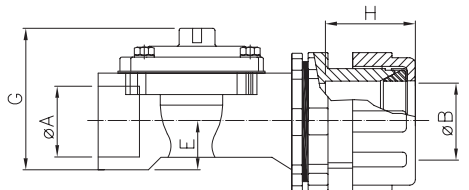
FDP/FDM with compression fitting



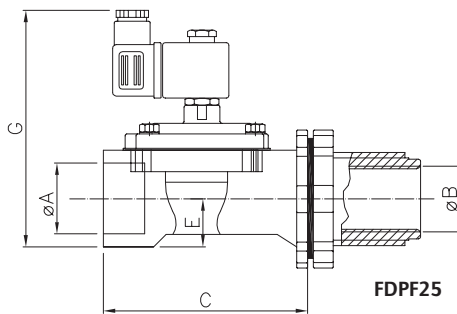
FDP25



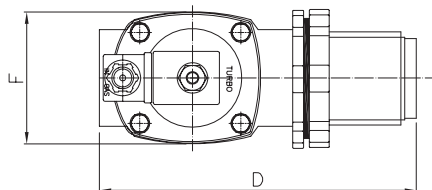
FDM25



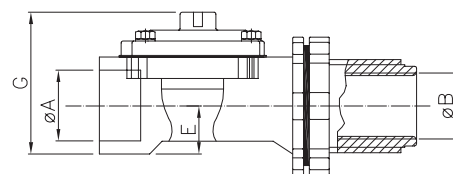
FDPF/FDMF with threaded outlet



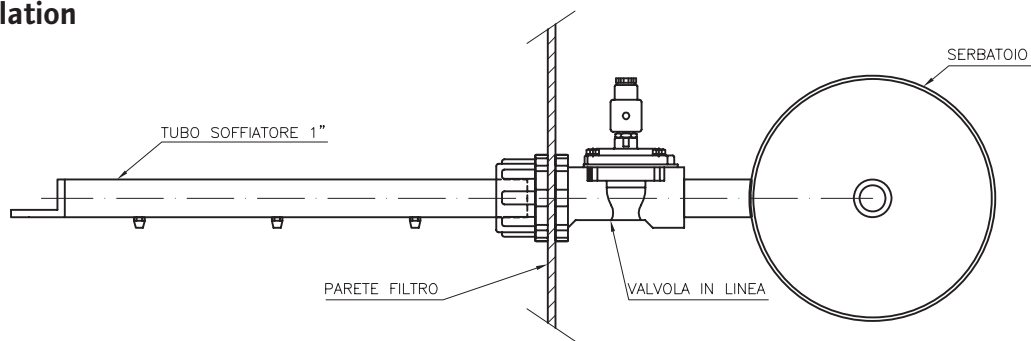
FDPF25



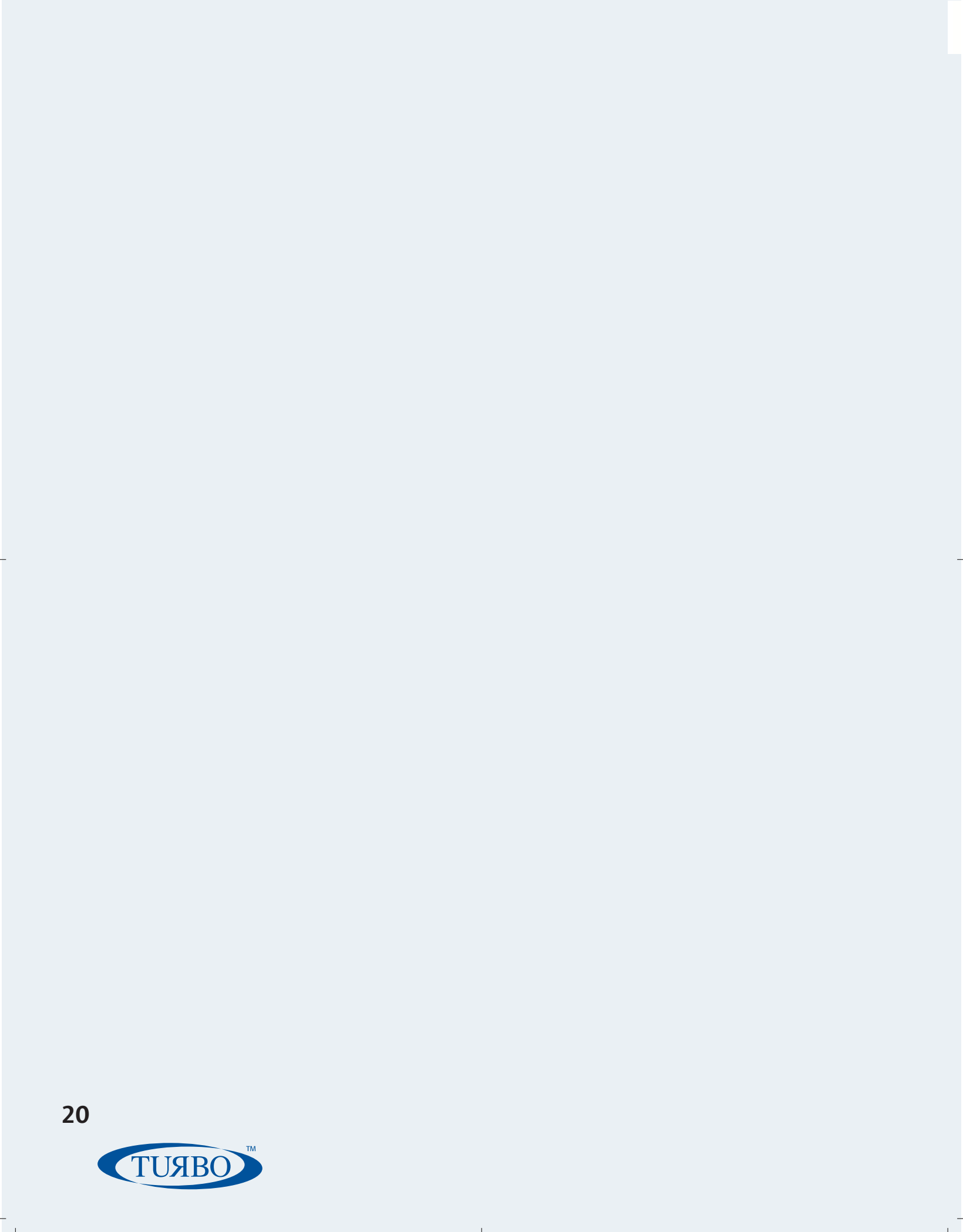
FDMF25



Installation



Model	Ø A	Ø B	C	D	E	F	G	H	Weight (Kg)
FDM 25	1"1/4	1"	114	172	27	74	74	49,5	0,9
FDP 25	1"1/4	1"	114	172	27	74	132	49,5	1
FDMF 25	1"1/4	1"F	114	161	27	74	74	30	0,9
FDPF 25	1"1/4	1"F	114	161	27	74	132	30	1



BULKHEAD CONNECTORS



C1 Bulkhead connector

PS/ PD Series

C2 Wrench

SG/ SD Series

C1 BULKHEAD CONNECTORS

PS/PD Series



I raccordi rapidi passaparete, sono stati realizzati per consentire ai tubi soffiatori, l'attraversamento della parete del filtro in maniera semplice e razionale.

Turbo dispone di due modelli:

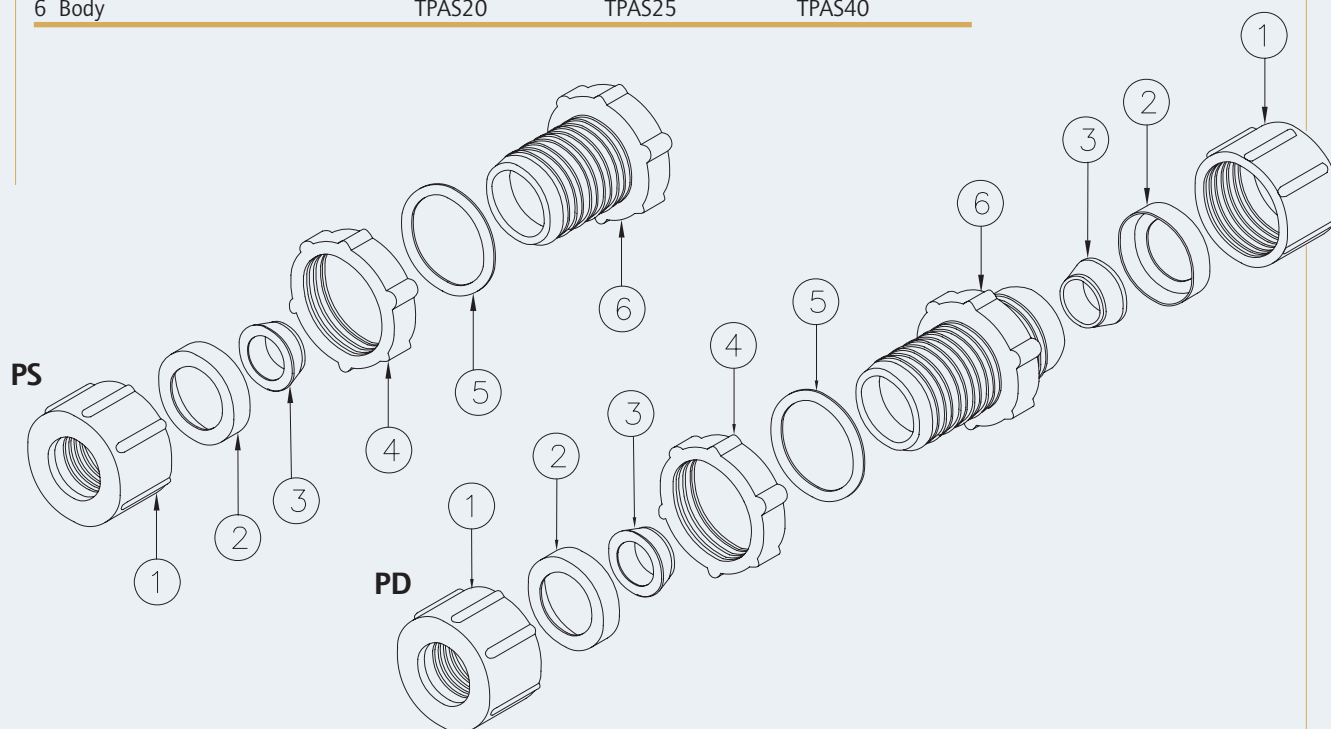
- **Serie PD**, usati per il collegamento tra due tubi
- **Serie PS**, usati per il tubo passante.

Turbo dispone inoltre di speciali chiavi per per il serraggio delle ghiera e dei dadi.

E' raccomandato un utilizzo in ambito esclusivamente pneumatico.

Non usare come sostegno meccanico.

DESCRIPTIONS	PS20	PS25	PS40
1 Compression nut	TDAL20/25	TDAL25	TDAL40
2 Seal retainer	OG20	OG25	OG40
3 Seal	G CON20	G CON25	G CON40
4 Lock nut	TGBA25	TGBA25	TGBA40
5 Washer	TFIBRA70x54x1,5	TFIBRA70x54x1,5	TFIBRA70x54x1,5
6 Body	TPAS20	TPAS25	TPAS40

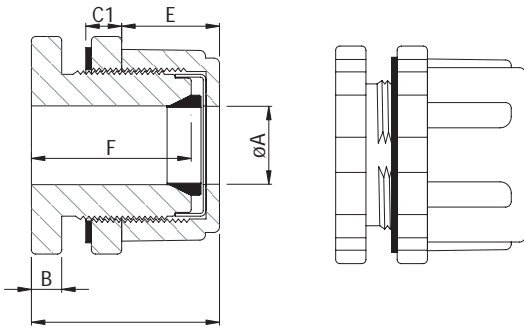


DESCRIPTION	PD20	PD25	PD40
1 Compression nut	TDAL20/25	TDAL25	TDAL40
2 Seal retainer	OG20	OG25	OG40
3 Seal	G CON20	G CON25	G CON40
4 Lock nut	TGBA25	TGBA25	TGBA40
5 Washer	TFIBRA70x54x1,5	TFIBRA70x54x1,5	TFIBRA90x54x1,5
6 Body	TGBA25	TGBA25	TGBA40

BULKHEAD CONNECTORS C1

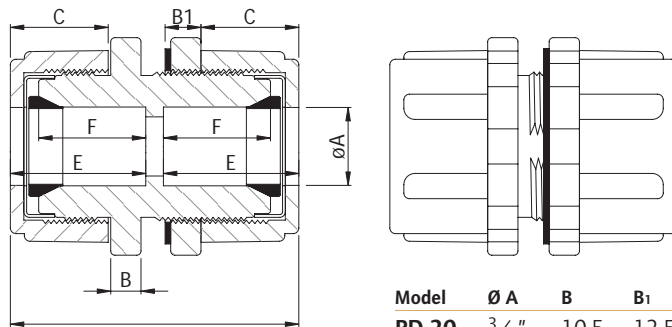
Dimensions PS/PD Series

PS



Model	Ø A	B	C1	D	E	F	Weight (Kg)
PS 20	3/4"	10,5	12,5	67	35	56	0,5
PS 25	1"	10,5	12,5	67	35	56	0,4
PS 40	1"1/2	14,5	16,5	92	40	79	0,8

PD



Model	Ø A	B	B1	C	D	E	F	Weight (Kg)
PD 20	3/4"	10,5	12,5	35	105	50	39	0,7
PD 25	1"	10,5	12,5	35	105	50	39	0,6
PD 40	1"1/2	14,5	16,5	40	140	67	55	1,2

Body , lock nut,
compression nut

Die cast aluminium

Seal

NBR -30°C / +100°C
Silicon -60°C / +200°C

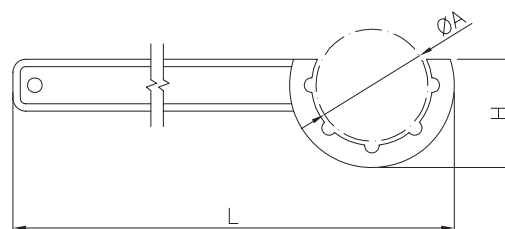
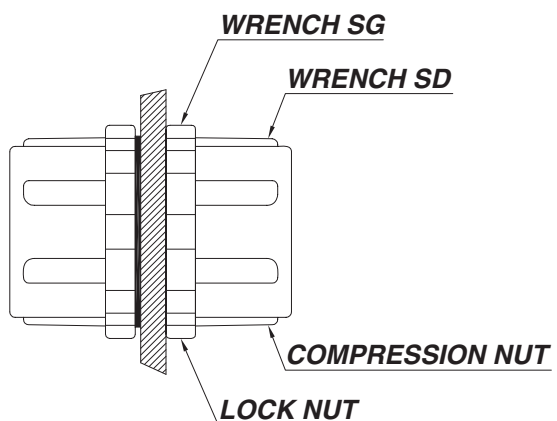
Mounting hole

3/4" Wall hole ø min. 56
1" Wall hole ø min. 56
1"1/2 Wall hole ø min. 72



C2 WRENCH

SG/SD Series



WRENCH SD FOR COMPRESSION NUT

Model	Ø	A	H	L
SD20	3/4"	61	70	350
SD25	1"	61	70	350
SD40	1"1/2	82	85	430

WRENCH SG FOR LOCK NUT

Model	Ø	A	H	L
SG20	3/4"	70	65	350
SG25	1"	70	65	350
SG40	1"1/2	90	85	430




PILOT VALVE BOXES

- D1 **RCP Series**
- D2 **RLD Series**

D PILOT VALVE BOXES

RCP RLD SERIES HOW TO ORDER

PILOT VALVE BOXES ACCORDING TO

ATEX  **II 3D T100°C**
IP66 **NEMA 4 UL50**

Turbo offer a range of pilot valve boxes for outdoor applications and hazardous locations.
 Model available:

- **RCP operate max 3 meters length of tubes**
- **RLD operate max 10 meters length of tubes**

Tubes 6 or 8 mm should be used for pneumatic connections to the pulse valves.
 Pilot valve boxes are supplied with pre-wired electric common terminals.
 Thermostat with heater is recommended to prevent moisture or freezing inside of pilot valve boxes.

ORDERING

example

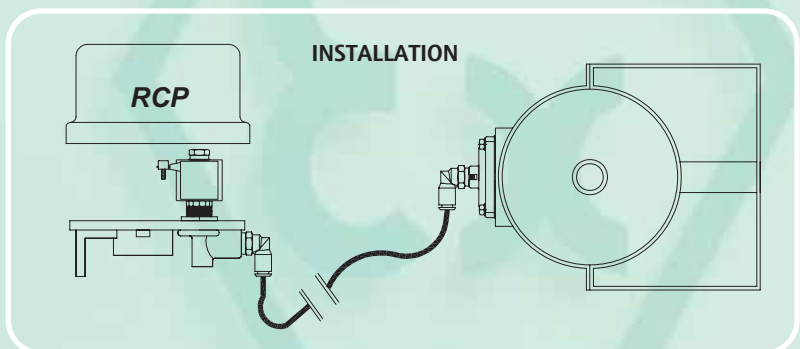
RCP 5 V/... R

RCP : PILOT VALVE BOX IP 66
RLD : PILOT VALVE BOX IP 66

NUMBER OF PILOT MOUNTED
 RCP 1-2-3-4-5 (Small size)
 RCP 6-7-8 (Medium size)
 RCP 9-10-11-12 (Large size)

TENSIONE
 24V 50-60Hz = 02450
 110V 50-60Hz = 11050
 220V 50-60Hz = 22050
 24Vcc = 024DC

Heater with thermostat (*option*)
 Power 70W for RCP5
 Power 120W for RCP8 e RCP12

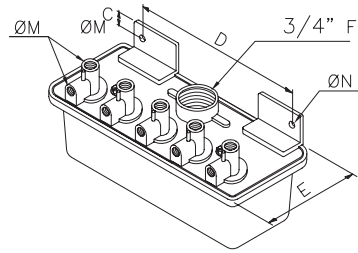
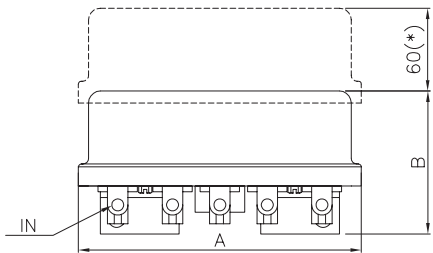




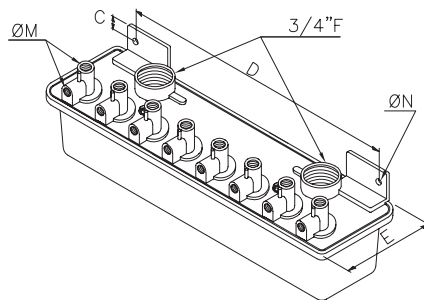
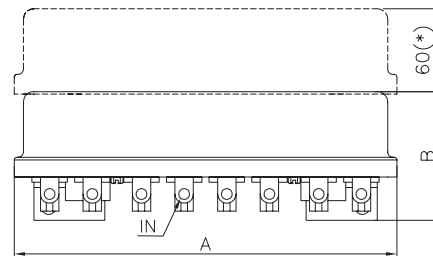
CHARACTERISTICS

Fluid	Filtered and oilfree compressed air
Operating pressure	min 0,5; max 7,5 bar
Temperature range	-20°C +80°C -40°C +80°C
Base and cover	Die cast aluminium
Core tube	Stainless Steel
Plunger	Stainless Steel
Screws	Stainless Steel
Coil insulation	Class H
Protection	IP66
Standard voltages	230 -110 - 24V 50-60VHz 19 VA 24VDC 15W

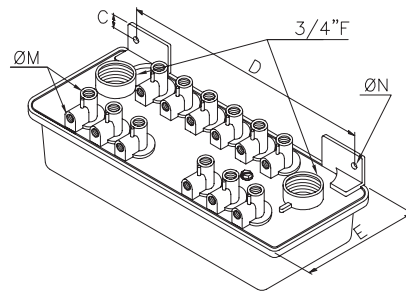
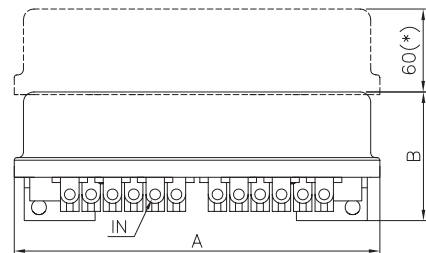
RCP5



RCP8



RCP12



Model	A	B	C	D	E	Ø M	Ø N	Weight (Kg)
RCP5	210	98	10	156	100	1/8"	11	1,7
RCP8	333	98	10	267	100	1/8"	11	3,2
RCP12	306	97	10	237	152	1/8"	11	4,4

D2 PILOT VALVE BOXES

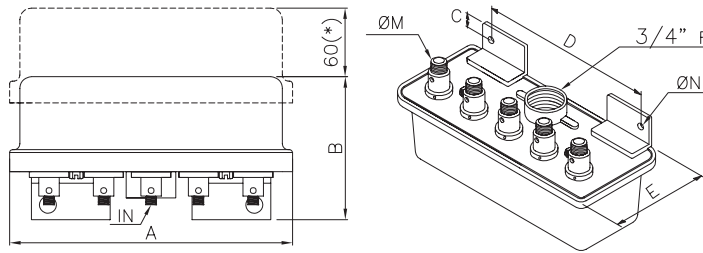
RLD Series



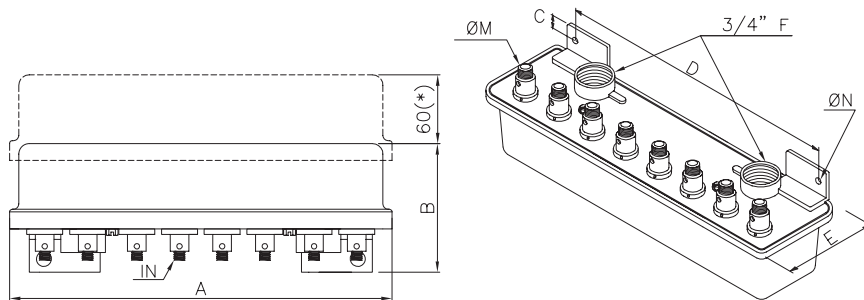
CARACTERISTICS

Fluid	Filtered and oilfree compressed air
Operating pressure	min. 0,5; max 7,5 bar
Temperature range	-20°C +80°C -40°C +80°C
Base and cover	Die cast aluminium
Core tube	Stainless Steel
Plunger	Stainless Steel
Screws	Stainless Steel
Coil insulation	Class H
Protection	IP66
Standard voltages	230 -110 - 24V 50-60VHz 19 VA 24VDC 15W

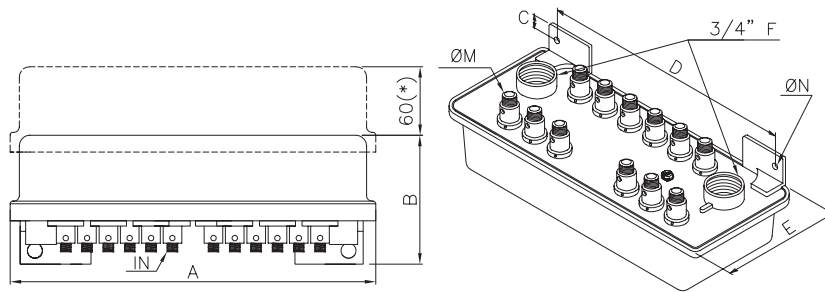
RLD5



RLD8



RLD12



Model	A	B	C	D	E	Ø M	Ø N	Weight (Kg)
RLD5	210	98	10	156	100	1/8"	11	1,7
RLD8	333	98	10	267	100	1/8"	11	3,2
RLD12	306	97	10	237	152	1/8"	11	4,4



Pilot valves

- E1 **SR Series**
- E2 **LD Series**

E PILOT VALVES**HOW TO ORDER****PILOT VALVE FOR PULSE VALVE**

Designed for panel mounting or Turbo boxes. Two models are available:

- **Series SR, operate max. 3 meters length of tube**
- **Series LD, operate max. 10 meters length of tube**

Two ways normally closed. Tubes 6 or 8 mm. diameter should be used for pneumatic connections to the pulse valves.

HOW TO ORDER*example***SRM****02450**

SRC : PILOT VALVE WITH CONNECTOR
SRM : PILOT VALVE SCREWS TERMINAL
LDC : PILOT VALVE WITH CONNECTOR
LDM : PILOT VALVE SCREWS TERMINAL

POWER

24V 50-60Hz = 02450
 110V 50-60Hz = 11050
 220V 50-60Hz = 22050
 24Vcc = 024DC

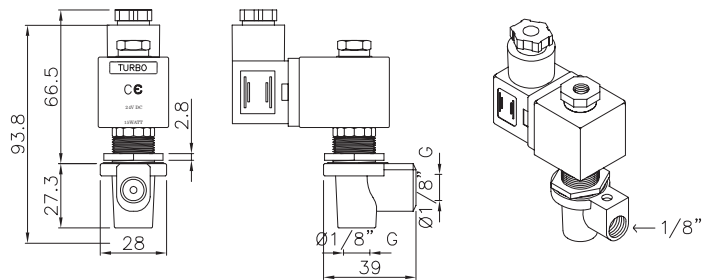
Code **SRM02450** is for pilot valve with screws terminal (**SRM**) power supply 24V 50Hz (**02450**).



CARACTERISTICS

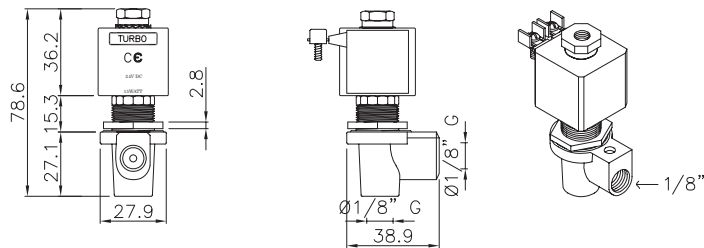
Fluid	Filtered and oilfree compressed air
Operating pressure	min. 0,5; max 7,5 bar
Temperature range	-20°C +80°C
Body	Brass
Core tube	Stainless Steel
Plunger	Stainless Steel
Coil insulation	Class H
Connector	PG9 / IP65
Standard voltages	230 -110 - 24V/50-60VHz (19 VA) 24VDC (15W)

**SRC
IP65**

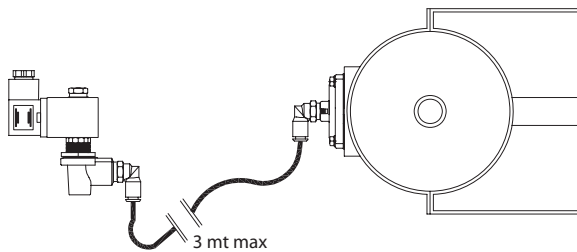


Available with ATEX coil zone 21 and zone 22

**SRM
IP00**



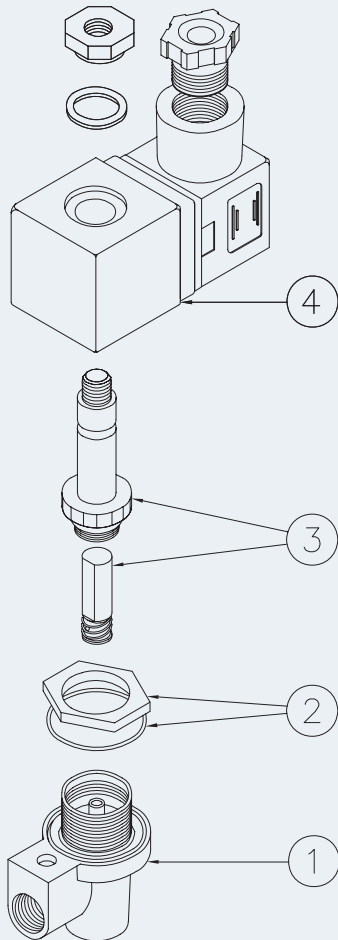
INSTALLATION



E1 PILOT VALVES

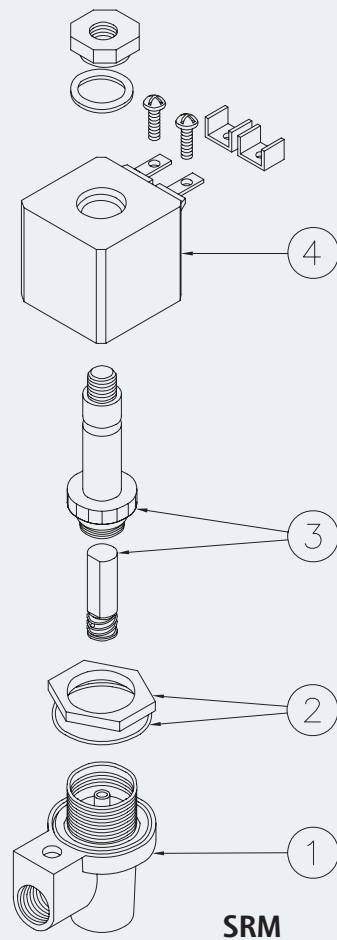
SR Series

SRC



DESCRIPTION	SRC
1 Body	PCRP
2 Lock nut + O-ring	TGHIERA 18x1 + OR3081
3 Pole assembly	GPC10/R
4 Coil + connector	BH10

DESCRIPTION	SRM
1 Body	PCRP
2 Lock nut + O-ring	TGHIERA 18x1 + OR3081
3 Pole assembly	GPC10/R
4 Coil + connector	BH10-A9



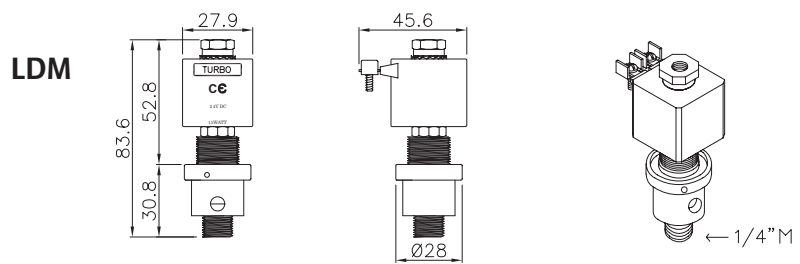
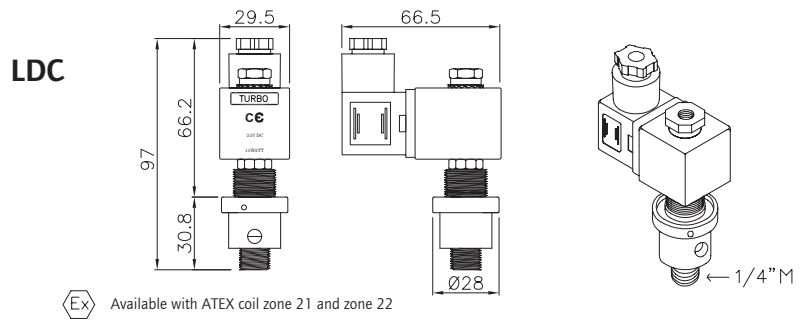
SRM

Long distance operation **LD** Series

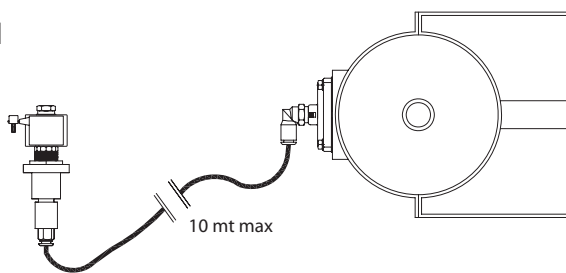


CARACTERISTICS

Fluid	Filtered and oilfree compressed air
Operating pressure	min. 0,5; max 7,5 bar
Temperature range	-20°C +80°C
Body	Brass
Core tube	Stainless Steel
Plunger	Stainless Steel
Coil insulation	Class H
Connector	PG9 / IP 65
Standard voltages	230 -110 - 24V/50-60VHz (19 VA) 24VDC (15W)



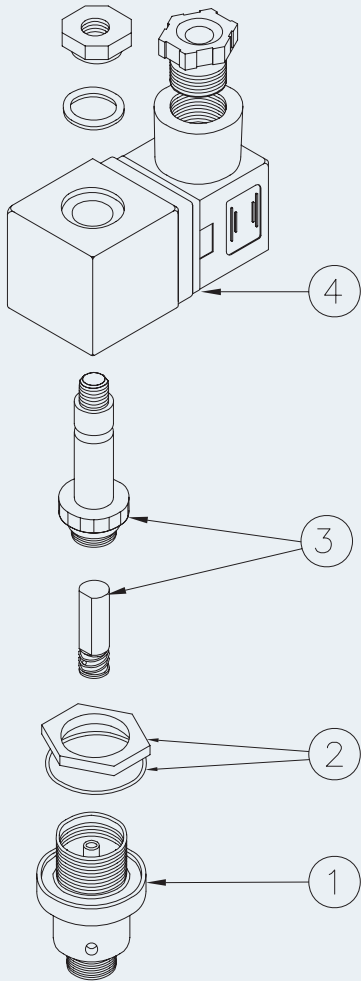
INSTALLATION



E2 PILOT VALVES

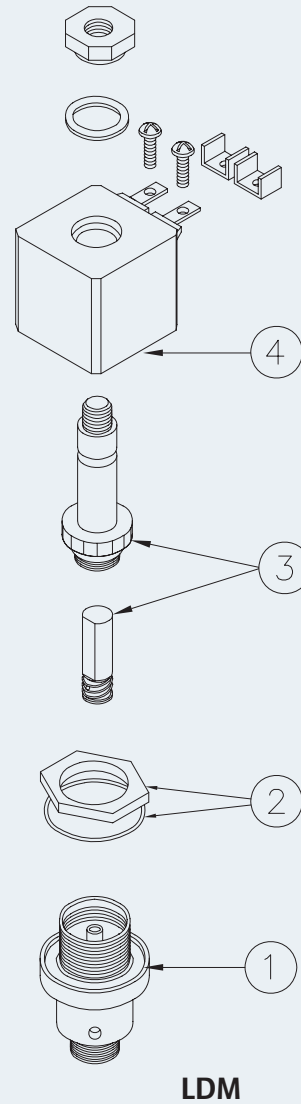
LD Series LONG DISTANCE OPERATION

LDC



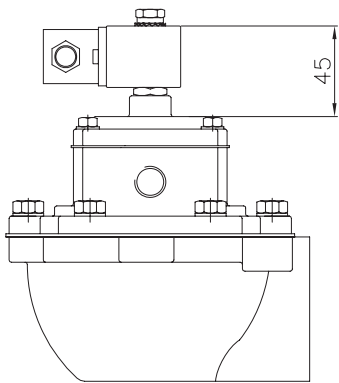
DESCRIPTION	LDM
1 Body	PCRLD
2 Lock nut + O-ring	TGHIERA18x1+OR3071
2 Pole assembly	GPC10/R
3 Coil + connector	BH10

DESCRIPTION	LDM
1 Body	PCRLD
2 Lock nut + O-ring	TGHIERA18x1+OR3071
3 Pole assembly	GPC10/R
4 Coil + connector	BH10-A9



LDM

ATEX PULSE VALVES

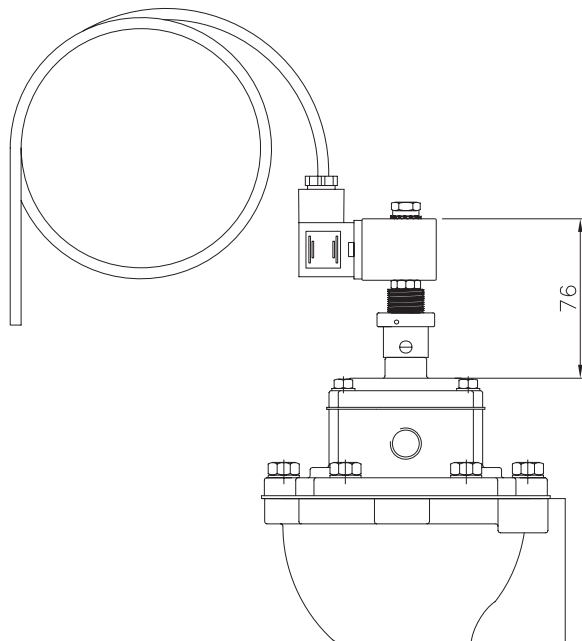


ATEX II3GD (zone 2 e 22)

Turbo pulse valves for potentially explosive atmospheres according to ATEX 94/9/EC valve is provided with moulded coil and connector IP 65 suitable for zone 2 e 22. Valve dimensions are same of standard model.



Turbo pulse valves for potentially explosive atmospheres according to ATEX 94/9/EC. Valve use encapsulated moulded soil with leads wire of different length. Pilot valve has brass body that change valve dimensions from standard model.



ATEX II2GD (zone 1 e 21)

LA DIRETTIVA 94/9/CE ATEX



La Direttiva dell'Unione Europea 94/9/CE stabilisce le caratteristiche costruttive e di funzionamento (obbligatorie dal 01/07/2003) delle apparecchiature e sistemi di protezione destinati ad essere impiegati in atmosfera potenzialmente esplosiva.

Tra gli aspetti della Direttiva, che riguarda tutti i rischi d'esplosione di qualsiasi natura (elettrica e non elettrica) sono da sottolineare:

- l'introduzione dei requisiti essenziali di Sicurezza (All. II - RES)
- l'applicabilità sia ai materiali per Miniera (Gr.I - in sottoterraneo) che per quelli di superficie (Gr.II)
- la classificazione degli apparecchi in "categorie" in funzione del livello di protezione richiesto
- la sorveglianza sulla produzione basata sui sistemi di gestione per la Qualità aziendali.

In pratica, la Direttiva ATEX considera per la prima volta il rischio d'esplosione dovuta ad una sorgente di tipo "non elettrico", come ad esempio l'insorgere di scintille di origine meccanica da urto o vibrazioni, surriscaldamenti superficiali di componenti meccanici ed elettrici anche dovuti a fenomeni non elettrici come vibrazioni, alte velocità di rotazione, blocchi meccanici e relativi sovraccarichi. Essa prevede inoltre di valutare con particolare attenzione il luogo di installazione, il deposito ed il funzionamento della macchina, per classificarlo in funzione della eventuale presenza e/o formazione di atmosfera esplosiva. La Direttiva mette infatti in debito conto, attraverso i RES, che le apparecchiature stesse possano essere fonte di atmosfera esplosiva e ne fornisce i relativi avvertimenti ai fini della prevenzione del fenomeno (All. II - p.to 1.0.1).

SCOPO DELLA DIRETTIVA - La Direttiva ATEX 94/9/CE è stata adottata dall'Unione Europea per liberalizzare il mercato dei prodotti destinati ad essere usati in atmosfera potenzialmente esplosiva, armonizzandone le caratteristiche tecniche e le norme applicabili.

Questa Direttiva mira quindi a preservare la salute delle persone, dei beni, propri ed altrui dai rischi derivanti dall'uso di apparecchi e sistemi di protezione in "atmosfera potenzialmente esplosiva".

ATMOSFERA ESPLOSIVA - Costituita da una miscela di sostanze infiammabili allo stato di gas, vapori, nebbie o polveri con aria in determinate condizioni atmosferiche (temp. da -20°C a +40°C e pressione da 0,8 a 1,1 bar sec. EN50014 e EN13463-1) in cui, a seguito dell'accensione / innesco, la combustione si propaga all'intera miscela incombusta (vedere anche Direttiva 94/9/CE, Cap. I, Art.1)

ATMOSFERA POTENZIALMENTE ESPLOSIVA - Atmosfera suscettibile di trasformarsi in atmosfera esplosiva a causa delle condizioni locali operative.

AREE A RISCHIO DI ESPLOSIONE SECONDO LA DIRETTIVA 1999/92/CE - Le aree a rischio di esplosione sono ripartite in zone in base alla frequenza e alla durata della presenza di atmosfere esplosive.

Zona 0: area in cui è presente in permanenza o per lunghi periodi o frequentemente un'atmosfera esplosiva consistente in una miscela di aria e di sostanze infiammabili sottoforma di gas vapori o nebbie.

Zona 1: area in cui la formazione di un'atmosfera potenzialmente esplosiva, consistente in una miscela di aria e di sostanze infiammabili sottoforma di gas vapori o nebbie, è probabile che avvenga occasionalmente durante le normali attività.

Zona 2: Area in cui durante le normali attività non è probabile la formazione di un'atmosfera esplosiva consistente in una miscela di aria e di sostanze infiammabili sottoforma di gas vapori o nebbie o, qualora si verifichi, sia unicamente di breve durata.

Zona 20: Area in cui è presente in permanenza, o per lunghi periodi, o frequentemente, un'atmosfera potenzialmente esplosiva sotto forma di nubi di polvere combustibile nell'aria.

Zona 21: Area in cui la formazione di un'atmosfera p esplosiva sotto forma di nubi di polvere combustibile nell'aria, è probabile che avvenga occasionalmente durante le normali attività.

Zona 22: Area in cui durante le normali attività non è probabile la formazione di un'atmosfera esplosiva sotto forma di nubi di polvere combustibile o, qualora si verifichi, sia unicamente di breve durata.

CORRISPONDENZA TRA ZONE E CATEGORIE

GRUPPO I (Sottoterraneo, metano e/o polveri combustibili)		GRUPPO II (Superficie, gas/aria o miscele di polvere/aria, vapori)					
Categoria M		Categoria 1		Categoria 2		Categoria 3	
1	2	G (Gas Zona 0)	D (Polveri Zona 20)	G (Gas Zona 1)	D (Polveri Zona 21)	G (Gas Zona 2)	D (Polveri Zona 22)
Attrezzature che garantiscono livello di sicurezza molto elevato Operazioni garantite in caso di possibili errori	Attrezzature che garantiscono livello di sicurezza elevato Interruzione possibile se si presenta una atmosfera potenzialmente esplosiva	Per attrezzature che garantiscono un livello di sicurezza molto elevato. Nei casi in cui le atmosfere potenzialmente esplosive si verificano per lunghi periodi o frequentemente.		Per attrezzature che garantiscono un livello di sicurezza elevato. Nei casi in cui le atmosfere potenzialmente esplosive si possono verificare occasionalmente.		Per attrezzature che garantiscono un livello di *sicurezza normale. Nei casi in cui le atmosfere potenzialmente esplosive si possono verificare solo raramente e per un breve periodo.	

La classificazione in "Zone", in un contesto industriale (es. prodotti ATEX del Gruppo II), in relazione alla potenziale presenza di gas, vapori, nebbie e polveri combustibili (in nubi o strati) compete all'utilizzatore, nei luoghi di lavoro ed attività lavorative che possono dar luogo a pericolo di esplosione, in conseguenza della sua valutazione dei rischi.

In Italia l'obbligo di legge è da riferirsi al DL 626/94 Titolo VIII-bis (sec. DL 233/03) in attuazione della Direttiva 1999/92/CE.

Il fabbricante fornisce tutti i particolari relativi ai Gruppi ed alle categorie del prodotto, affinché l'utilizzatore possa decidere in quale "Zona" il prodotto ATEX può operare in sicurezza, anche se non potrà prevedere dove e come effettivamente opererà.

