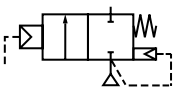
POWER PULSE VALVES

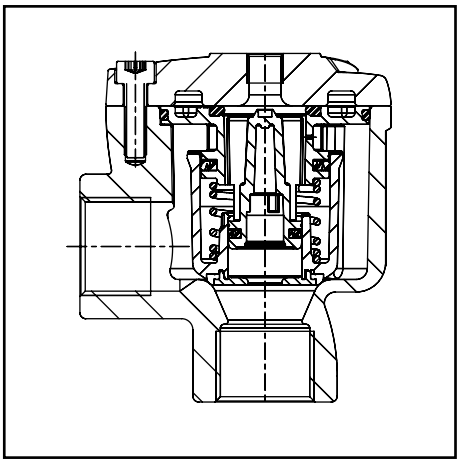
remote pilot
threaded or Quick Mount connection
3/4 to 1 1/2

NC 

2/2
Series
353

FEATURES

- *The piston cartridge pulse valves are especially designed for dust collector service applications, combining high flow, long life and extremely fast opening and closing to produce reliable and economical operation*
- *The angle bodies and special piston cartridge result in unique operating features required for dust collector service applications*
- *The high quality polyacetal (POM) piston cartridge guarantees a long operating life and a large temperature range*
- *The design with Quick Mount connections eliminates the time consuming thread cutting and sealing resulting in maximum flexibility while the valve will be anchored to the pipes*
- *Valves can be supplied according to ATEX Directive 94/9/EC for non-electrical equipment by using suffix GD*
- *The components satisfy all relevant EC directives*



GENERAL

Differential pressure (PS) 0,3 - 8,5 bar [1 bar = 100kPa]
Ambient temperature range -20 to +85°C

fluid	temperature range (TS)	piston
air	-20 to +85°C	POM (polyacetal)

CONSTRUCTION

Body Aluminium
Bonnet Aluminium
Quick Mount clamps Steel
Bolts Steel
Sealings NBR (nitrile)
Piston/cartridge POM (polyacetal) / NBR (nitrile)

PILOT SOLENOID VALVES (2/2 NC function)

main pulse valve catalogue number	remote pilot connection	recommended executions		
		orifice size (mm)	manifold pilot valves in a box (IP65)	single pilot valves (IP20)
E353A810 **E353A820** **S353A710** **S353A720** **S353A810** **S353A820**	G 1/8	3,6	pilot box series 110 2 to 12 pilots 1/8	series 257

SPECIFICATIONS

pipe size	remote pilot connection	orifice size	flow coefficient Kv		operating pressure differential (bar)		catalogue number		Quick Mount clamps
					min.	max. (PS) air			
		(mm)	(m^3/h)	(l/min)		~/=	standard	ATEX dust II2G/D	
(G*) - Threaded pipe connection									
3/4	1/8	20	14	233	0,3	8,5	**E353A810**	**E353A810 GD**	**-**
1	1/8	25	23	383	0,3	8,5	**E353A820**	**E353A820 GD**	**-**
11/2	1/8	40	46	768	0,3	8,5	**E353A830**	**E353A830 GD**	**-**
(Ø) - Quick Mount connection on inlet									
3/4	1/8	20	14	233	0,3	8,5	**S353A810**	**S353A810 GD**	**C117-281**
1	1/8	25	23	383	0,3	8,5	**S353A820**	**S353A820 GD**	**C117-282**
11/2	1/8	40	46	768	0,3	8,5	**S353A830**	**S353A830 GD**	**C117-290**
(Ø) - Quick Mount connection on inlet & outlet									
3/4	1/8	20	14	233	0,3	8,5	**S353A710**	**S353A710 GD**	**C117-281**
1	1/8	25	23	383	0,3	8,5	**S353A720**	**S353A720 GD**	**C117-282**
11/2	1/8	40	46	768	0,3	8,5	**S353A730**	**S353A730 GD**	**C117-290**

OPTIONS

- Pilot boxes containing 2 to 12 pilot valves.
- Pilot valves can be equipped with explosionproof solenoids for hazardous locations according to "**ATEX**" and national standards.
- Additional Quick Mount clamps for outlet connection, see "Specifications" table.

INSTALLATION

- The valves can be mounted in any position without affecting operation.
- Pipe connection identifier is: G*= combination thread according to ISO 228/1 and ISO 7/1 or Ø for Quick Mount.
- For Quick Mount types tightness is achieved by the O-ring sealing on the pipes (3/4"=Ø26,4 to 27,4 and 1"=Ø33,2 to 34,2 and 1 1/2"=Ø47,8 to 48,8) according to ISO 4200.
- When connecting piping or tubing to the G1/8 connection in the valve bonnet, the remote ASCO pilot valve should be mounted as close as possible to the main pulse valve. Connection tubing lengths of 3 meter or less have little effect on the pulse response. Installations with over 3 meter of tubing must be tested under actual operating conditions. Tubing with Ø 6 mm O.D. is recommended for all installations.
- Other pipe threads are available on request.
- Installation/maintenance instructions are included with each valve.
- Spare parts kit and replacement coils are available.

DIMENSIONS (mm), WEIGHT (kg)

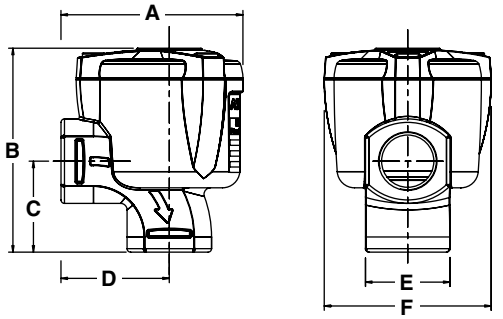


Fig. 1: Threaded type

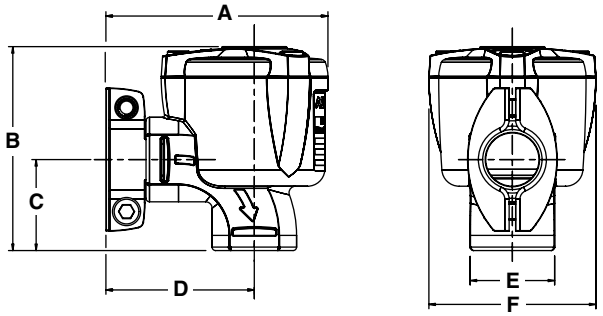


Fig. 2: Quick Mount type (inlet only)

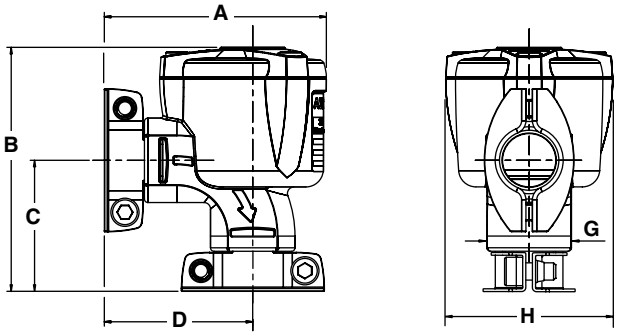


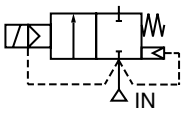
Fig. 3: Quick Mount type (inlet & outlet)

catalogue number	A	B	C	D	E	F	weight	(C)
E353A810 (GD)	84	94	42	50	39	77	0,42	Fig.1
E353A820 (GD)	96	100	51	62	46	77	0,53	Fig.1
E353A830 (GD)	121	127	60	71	62	112	1,07	Fig.1
S353A810 (GD)	103	94	42	69	39	77	0,50	Fig.2
S353A820 (GD)	115	100	51	81	46	77	0,59	Fig.2
S353A830 (GD)	146	127	60	97	62	112	1,27	Fig.2
S353A710 (GD)	103	113	61	69	39	77	0,58	Fig.3
S353A720 (GD)	115	119	70	81	46	77	0,65	Fig.3
S353A730 (GD)	146	153	86	97	62	112	1,27	Fig.3

(C) construction type

PULSE VALVES

single stage, remote pilot
threaded body or compression fitting
3/4 to 1 1/2

NC 

2/2
Series
353

FEATURES

- *The diaphragm pulse valves are especially designed for dust collector service applications, combining high flow, long life and extremely fast opening and closing to produce reliable and economical operation*
- *The high flow, angle type bodies in combination with the special main diaphragm assemblies give the unique operating features required for dust tcollector service applications*
- *Integral compression fittings for fast, easy, secure installation*
- *Valves can be supplied according to ATEX Directive 94/9/EC for non-electrical equipment by using suffix GD*
- *The valves satisfy all relevant EC directives*

GENERAL

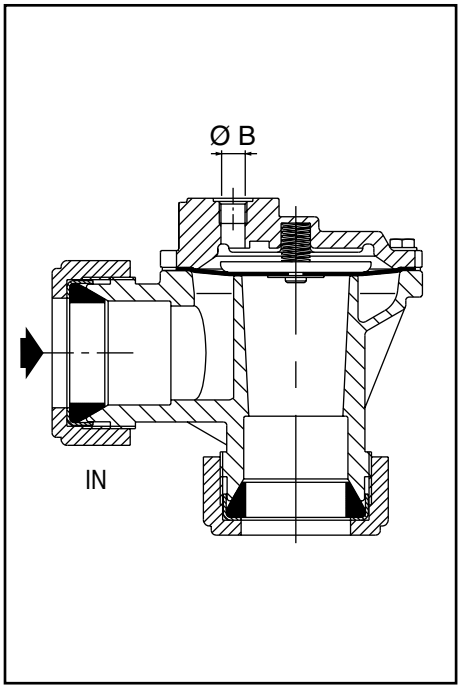
Differential pressure (PS) 0,35 - 8,5 bar [1 bar = 100kPa]
Ambient temperature range -20 to +85°C

fluids (✶)	temperature range (TS)	diaphragm (✶)
air	-40 to +85 °C	TPE (3/4 und 1)
	-20 to +85 °C	CR (1 1/2)

MATERIALS IN CONTACT WITH FLUID

(✶) Ensure that the compatibility of the fluids in contact with the materials is verified

Body Aluminium / Stainless steel 316L
Spring Stainless steel
Diaphragm TPE (thermoplastic polyester elastomer oder CR (chloroprene)



PILOT SOLENOID VALVES (2/2 NC function)

main pulse valve catalogue number	remote pilot connection	recommended executions		
		orifice size (mm)	manifold pilot valves in a box (IP 65)	single pilot valves (IP20)
G353A041	G 1/8	3.6	pilot box series **110** 2 to 12 pilots 1/8	series 257
G353-055				
G353A042				
G353-056				
G353A045	G 1/4	5,6	pilot box series **C20** 4 to 6 valves 1/4	series 262 / 272
G353-066				

SPECIFICATIONS

pipe size	remote pilot connection	orifice size	flow coefficient Kv		operating pressure differential (bar)		catalogue number		FPM
					min.	max. (PS) air (✶)			
G	Ø B	(mm)	(m³/h)	(l/min)		~/=	aluminium	stainless steel 316L	
G - threaded pipe connection									
3/4	G 1/8	24	14	233	0,35	8,5	**G353A041**	**G353A130**	**V**
1	G 1/8	27	17	283	0,35	8,5	**G353A042**	**G353A131**	**V**
1 1/2	G 1/8	52	46	768	0,35	8,5	**G353A045**	**-**	**V**
Ø - Compression fitting pipe connection									
3/4	G 1/8	24	14	233	0,35	8,5	**G353-055**	**-**	**V**
1	G 1/8	27	17	283	0,35	8,5	**G353-056**	**-**	**V**
1 1/2	G 1/8	52	43	717	0,35	8,5	**G353-066**	**-**	**V**

OPTIONS

- Valves can also be supplied with FPM (fluoroelastomer) diaphragms and seals. Use the appropriate optional suffix letter for identification
- Sequential controller for pilot solenoid valves
- Pilot boxes containing 2 to 12 pilot solenoid valves
- Pilot solenoid valves can be equipped with explosionproof sol**enoi**ds for hazardous locations according to “ATEX” and national standards

INSTALLATION

- The valves can be mounted in any position without affecting operation
- Threaded pipe connection is G (ISO 228/1) or compression fitting
- When connecting piping or tubing to the G1/8 connection in the valve bonnet, the remote ASCO pilot valve should be mounted as close as possible to the main pulse valve. Connection tubing lengths of 3 meter or less have little effect on the pulse response. Installations with over 3 meter of tubing must be tested under actual operating conditions. Tubing with Ø 6 mm O.D. is recommended for all installations
- For compression fitting types tightness is achieved by the compressed gasket on the blow tube
- Other pipe threads are available on request
- Installation/maintenance instructions are included with each valve
- Spare parts kits and replacement coils are available

DIMENSIONS (mm), WEIGHT (kg)

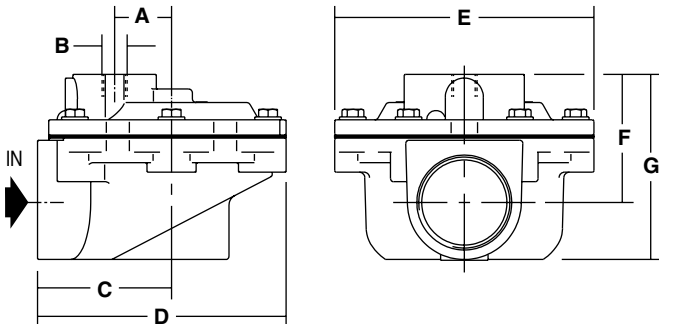


Fig. 1: Threaded pipe connection - aluminium

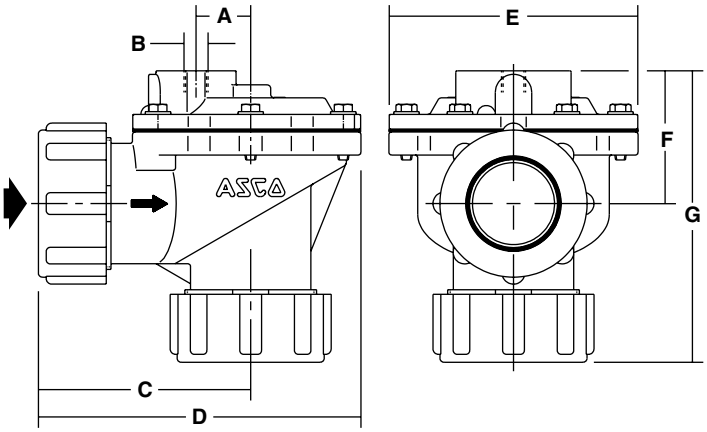


Fig. 2: Compression type fitting - aluminium

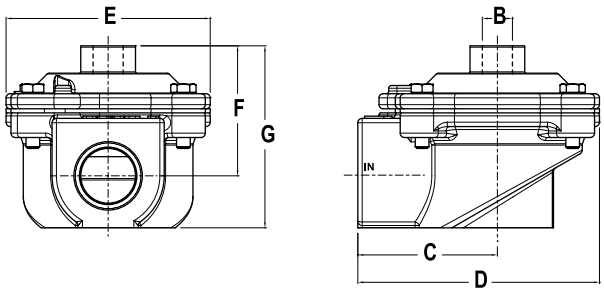


Fig. 3: Threaded pipe connection - Stainless steel

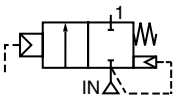
catalogue number	A	B	C	D	E	F	G	weight (1)	(C)
G353A041	-	G 1/8	51	89	75	41	65	0,45	Fig. 1
G353A042	-	G 1/8	51	89	75	41	64	0,4	Fig. 1
G353A045	30	G 1/4	71	130	136	71	98	1	Fig. 1
G353-055	-	G 1/8	88	125	75	47	109	0,58	Fig. 2
G353-056	-	G 1/8	88	124	75	47	129	0,61	Fig. 2
G353-066	30	G 1/4	117	177	136	73	161	1,33	Fig. 2
G353A130	-	G 1/8	51	89	75	41	64	0,92	Fig. 3
G353A131	-	G 1/8	51	89	75	41	64	0,87	Fig. 3

(**C**) Construction type

PULSE VALVES

dual stage, remote pilot
threaded body 1 1/2 to 3 or
compression fitting Ø 1 1/2

NC



2/2
Series
353

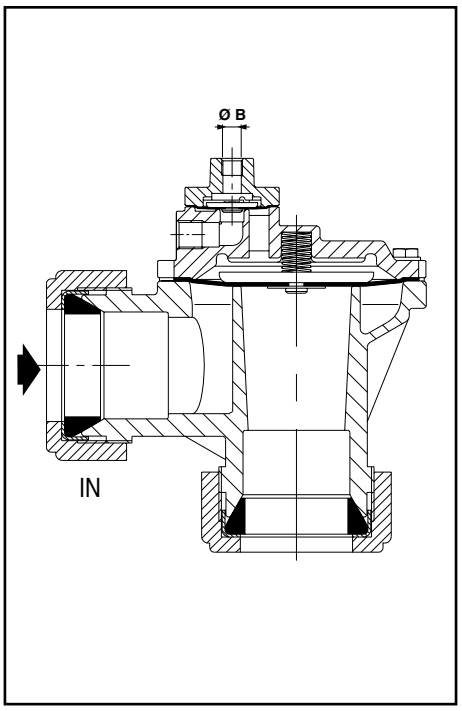
FEATURES

- *The pulse valves are especially designed for dust collector service applications, combining high flow, long life and extremely fast opening and closing to produce reliable and economical operation*
- *The high flow, angle type bodies in combination with the special main diaphragm assemblies give the unique operating features required for dust collector service applications*
- *Integral compression fittings for fast, easy, secure installation*
- *Valves can be supplied according to ATEX Directive 94/9/EC for non-electrical equipment by using suffix GD*
- *The components satisfy all relevant EC directives*

GENERAL

Differential pressure (PS) 0,35 - 8,5 bar [1 bar = 100kPa]
Ambient temperature range -20 to +85°C

fluids	temperature range (TS)	diaphragm
air	-20 to +85°C	CR (chloroprene)



CONSTRUCTION

Body Aluminium
Springs Stainless steel
Diaphragms CR (chloroprene)

PILOT SOLENOID VALVES (2/2 NC function)

main pulse valves	remote pilot connection	recommended executions		
		orifice size (mm)	manifold pilot valves in a box (IP65)	single pilot valves (IP20)
G353A046 G353A063	G1/8	3,6	pilot box series **110** 2 to 12 valves 1/8	series 257
G353A048 G353A049 G353-058	G1/4	5,6	pilot box series **C20** 4 to 6 valves 1/4	–

SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		catalogue number		OPTION FPM
				min.	max. (PS) air			
	(mm)	(m^3/h)	(l/min)		~ /=	standard	ATEX II2G/D	
G - Threaded pipe connection								
1 1/2	52	46	768	0,35	8,5	**G353A046**	**G353A046 GD**	**V**
2	66	77	1290	0,35	8,5	**G353A048**	**G353A048 GD**	**V**
2 1/2	66	92	1540	0,35	8,5	**G353A049**	**G353A049 GD**	**V**
3	76	170	2833	1,0	6,0	**G353-058**(1)	**G353-058 GD**(1)	**V**
Ø - Compression fitting pipe connection								
1 1/2	52	43	717	0,35	8,5	**G353A063**	**G353A063 GD**	**V**

(1) Threaded pipe connections are external (male thread).

OPTIONS

- Valves can also be supplied with FPM (fluorelastomer) diaphragms and seal materials. Use the appropriate optional suffix letter for identification
- Sequential controller for pilot solenoid valves
- Pilot boxes containing 2 to 12 pilot solenoid valves
- Pilot solenoid valves can be equipped with explosionproof solenoids for hazardous locations according to "**ATEX**" and national standards

INSTALLATION

- The valves can be mounted in any position without affecting operation
- Threaded pipe connection is: G = G (ISO 228/1) or compression fittings
- When connecting piping or tubing to the G1/8 or G1/4 connection in the valve bonnet, the remote ASCO pilot valve should be mounted as close as possible to the main pulse valve. Connection tubing lengths of 3 meter or less have little effect on the pulse response. Installations with over 3 meter of tubing must be tested under actual operating conditions. Tubing with Ø 6 or Ø 8 mm O.D. is recommended for all installations
- For compression fitting types tightness is achieved by the co mpressed gasket on the blow tube
- Other pipe threads are available on request
- Installation/maintenance instructions are included with each valve
- Spare parts kit and replacement coils are available

DIMENSIONS (mm), WEIGHT (kg)

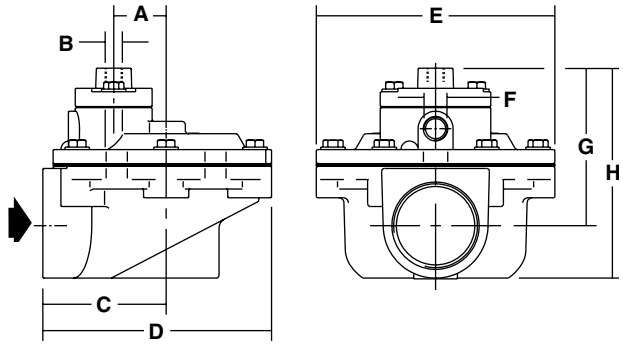


Fig.1 Threaded type

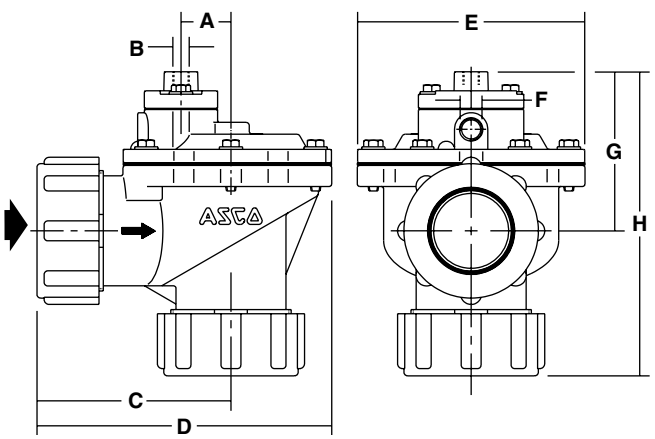


Fig.2 Compression fitting type

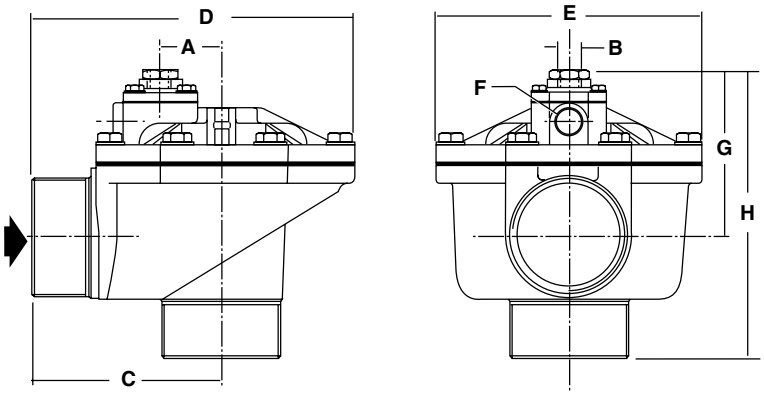


Fig. 3 External threaded type

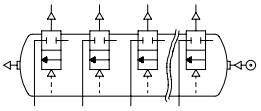
catalogue number	A	B	C	D	E	F	G	H	weight	(C)
G353A046 (GD)	30	G 1/8"	71	130	136	G 3/8"	90	120	1,10	Fig.1
G353A048 (GD)	30	G 1/4"	95	168	165	G 3/4"	121	166	2,60	Fig.1
G353A049 (GD)	30	G 1/4"	95	168	165	G 3/4"	121	166	2,30	Fig.1
G353-058 (GD)	48	G 1/4"	143	240	192	G 1/2"	121	214	3,70	Fig.3
G353A063 (GD)	30	G 1/8"	87	177	136	G 3/8"	96	183	1,43	Fig.2

(**C**) construction type

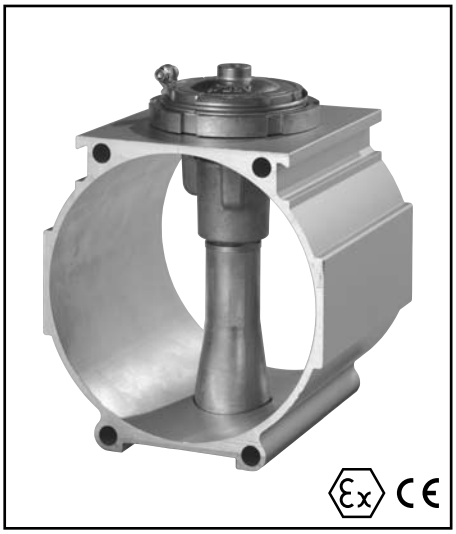
POWER PULSE TANK SYSTEM (Ø160)

remote pilot

1

NC 

2/2 Series **355**



FEATURES

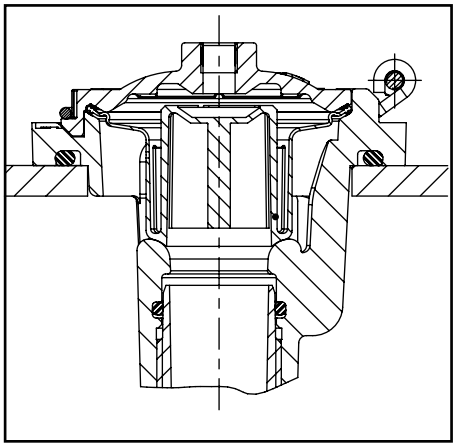
- *Power Pulse Tank System using aluminium profile and end covers with CE approval according to Directive 97/23/EC for Pressure Equipment*
- *Full immersed valve system with special springless piston/diaphragm design offers highest peak pressure and best flow performance operating features required for dust collector applications*
- *The high quality TPE piston/diaphragm guarantees a long operating life and a large temperature range*
- *Possibility to apply different combinations of pitch distances and upto 24 valves*
- *Easy to connect to other tank systems. Service connections for different accessories such as: filter regulator, pressure gauge, safety valve and automatic / manual drain valve*
- *Several blow pipe connections available, such as: Quick Mount, push-in, hose or threaded*

GENERAL

Differential pressure (PS)	0,3 to 8,5 bar [1 bar = 100 kPa]
Ambient temperature range	-20°C to +85°C

Tank System

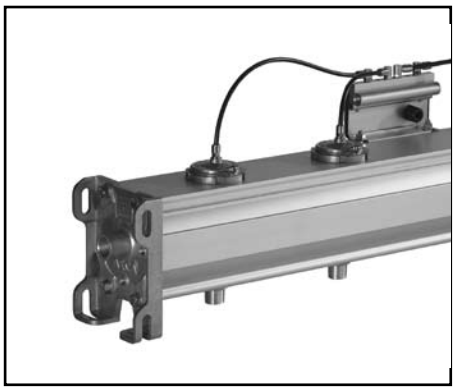
volume	0,20 dm³ per cm tank
recommended min. tank volume	10 dm³ (equals 500 mm tank length)
min. pitch distance	120 mm
maximum length	3000 mm
min. pulse time	50 ms



fluid	temperature range (TS)	piston/diaphragm
air	-20 to +100 °C	TPE (thermoplastic polyester elastomer)

CONSTRUCTION

Tank	Anodized aluminium
Adapter/body	Aluminium
Clipring	Stainless steel
Clamps	Stainless steel
Bolts (clamps)	Stainless steel
Sealings & disc	NBR (nitrile)
Piston/diaphragm	TPE (thermoplastic polyester elastomer)



RECOMMENDED PILOT VALVES AND BOXES (2/2 NC function)

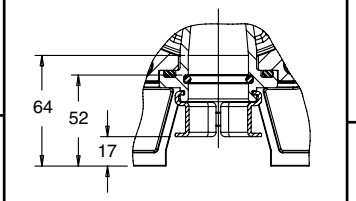
main pulse valve catalogue number	remote pilot valve connection	orifice size (mm)	pilot valve box (IP65)	single pilot valve (IP20)
E355AN . . **E355AO . .** **E355AP . .** **E355AQ . .**	G1/8	3,6	pilot box series **110** 2 to12 pilots 1/8	US E257A001 US E257A002 US E257A003

SPECIFICATIONS

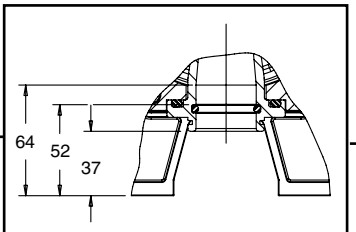
pipe size	remote pilot connection	orifice size	flow coefficient Kv		operating pressure differential (bar)		catalogue number
					min.	maximum (PS)	
	G	(mm)	(m^3/h)	(l/min)		air	
1"	1/8	25	23	384	0,30	8,5	**. E355A . . .**

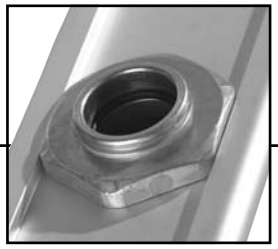
ORDERING INFORMATION - for example: F E355A N 06 + Dimension code (specified on next page)

F(1) — **E 3 5 5 A** — **N** — Quick mount with clamps (Ø 33,2-34,2)

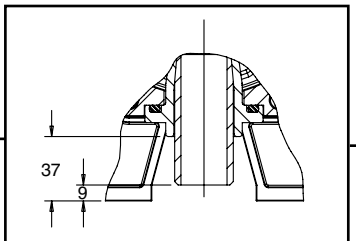


O — Push-in connection (Ø 33,2-34,2)

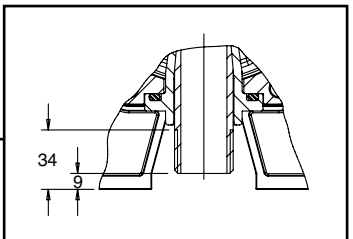


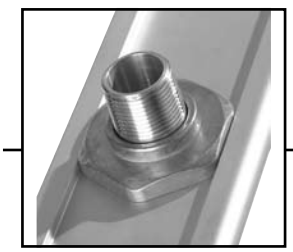


P — Male hose connection (Ø 33,5-33,9)

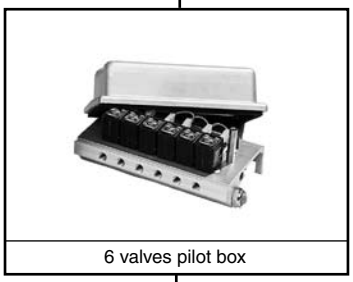


Q — Male threaded connection (R1")

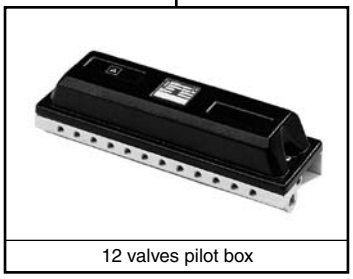




06(2)



6 valves pilot box



12 valves pilot box

(1) for a selection of pilot boxes see pages X003-29 to X003-38
(2) specify required number of valves between 01 and 24

ORDERING INFORMATION DIMENSION CODE

Start distance	A	(min. 110 mm)
Standard pitch	B/C/D	(min. 120 mm)
Deviating pitch	B/C/D	(min. 120 mm)
End distance	A	(min. 110 mm)

Example I: Dimension code for a 4 valves tank system:

Operator	Remote, pilotbox controlled 24V/DC without heating
Connection	Quick Mount
Number of valves	4 pcs
Start and End distance	110 mm
Standard pitch	170 mm
Deviating pitch	None
Catalogue number	F E355AN04
Dimension code	110170
Pilotbox	S G110A040 24V/DC
Complete order number	**F E355AN04 + 110170**

Example II: Dimension code for a 12 valves tank system:

Operator	Remote, controlled with external pilotbox
Connection	Thread
Number of valves	12 pcs
Start and End distance	130 mm
Standard pitch	140 mm
Deviating pitch	Between valve 3 and 4 is position D; 180 mm and between valve 7 and 8 is position H; 200 mm
Catalogue number	E355AQ12
Dimension code	130140D180H200
Complete order number	**E355AQ12 + 130140D180H200**

For assistance please consult our website: www.asconumatics.eu

DIMENSIONS (mm)

Fig. 1 (front view)

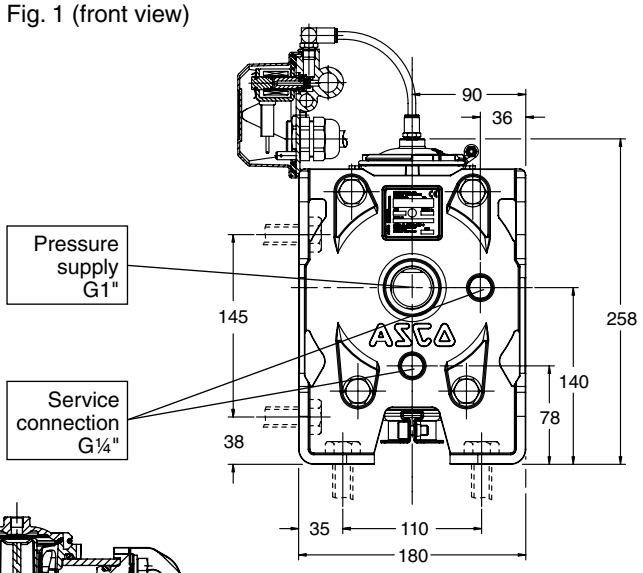
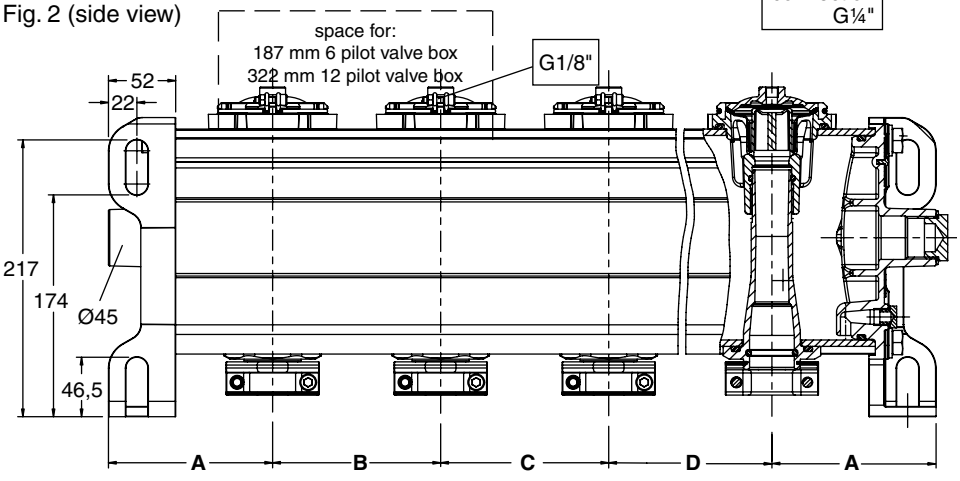


Fig. 2 (side view)



OPTIONS

- Special customized executions
- Pilot boxes containing 2 to 12 pilot valves
- Separate pilot valves can be equipped with explosionproof solenoids for hazardous locations according to "**ATEX**" (CENELEC) and national standards
- Separate Quick Mount clamps for outlet connection; kit number: **C132-679**

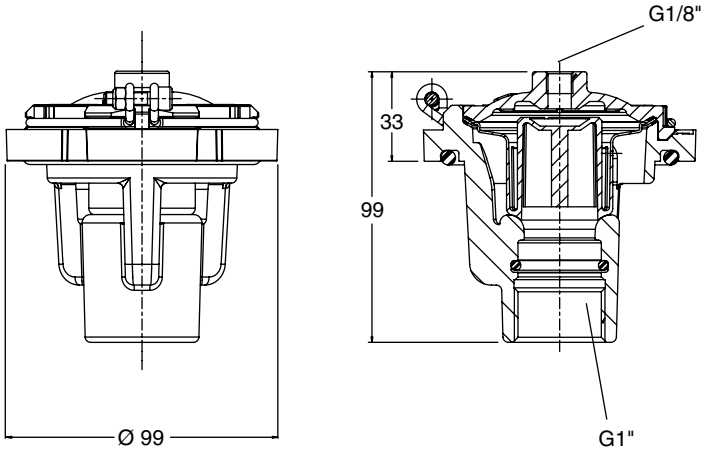
INSTALLATION

- Tank system can be mounted in any position using the standard brackets integrated in the end cap (M12 bolts recommended) without affecting operation
- Pipe connection identifier is: R = according to ISO 7/1, G = according to ISO 228/1 or Ø for other outlet connections
- For Quick Mount types tightness is achieved by the O-ring sealing on the pipe (1" = Ø33,2 to 34,2) according to ISO 4200
- When connecting piping or tubing to the G1/8 connection in the valve bonnet, the remote ASCO pilot valve should be mounted as close as possible to the main pulse valve. Connection tubing lengths of 3 meter or less have little effect on the pulse response. Installations with over 3 meter of tubing must be tested under actual operating conditions. Tubing with Ø 6 mm is recommended for all installations
- Installation/maintenance instructions are included with each tank system
- Spare valves, spare parts kits and coils are available

SEPARATE / SPARE POWER PULSE VALVES

FEATURES - *(same as for the tank system)*

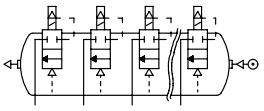
DIMENSIONS (mm), **WEIGHT** (kg)



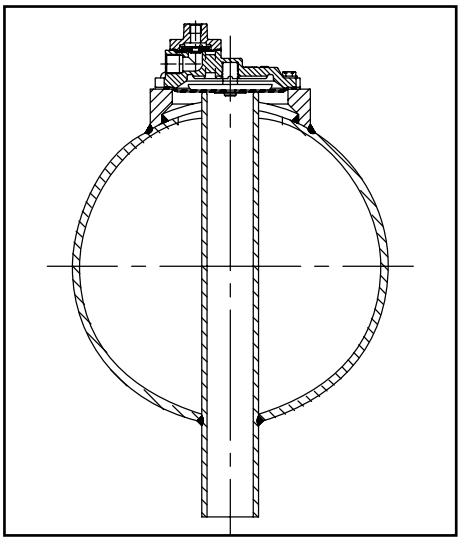
SPECIFICATIONS

pipe size	catalogue number	weight
(G) Female threaded connection (ISO 228/1)		
1	**E353A231**	**0,428**

TANK SYSTEM
(Ø 8")
remote pilot
1 1/2

NC 

2/2
Series
357



FEATURES
- *Immersion tank system using steel profile and welded end covers with CE approval according to Directive 87/404/EC*
- *Immersed valve system with special diaphragm design offers highest peak pressure and best flow performance operating features required for dust collector applications*
- *The high quality diaphragms are reinforced and wear resistant to guarantee a long operating life, even under harsh conditions*
- *Possibility to apply different combinations of pitch distances*
- *Service connections for different accessories such as: filter regulator, pressure gauge, safety valve and automatic/manual drain valve*
- *Available with hose and threaded blow pipe connections*

GENERAL
Differential pressure (PS) 0,35 to 8 bar [1 bar = 100kPa]
Ambient temperature range -10 to +80°C

fluid	temperature range (TS)	seal materials
air	-10 to +80°C	CR (chloroprene)

CONSTRUCTION
Tank Steel, grey
Bonnet Aluminium
Bolts Stainless steel
Sealing & Diaphragm NBR (nitrile) / CR (chloroprene)

PILOT SOLENOID VALVES (2/2 NC function)

pipe size	main pulse valves	remote pilot connection	recommended executions		
			orifice size (mm)	manifold pilot valves in a box (IP 65)	single pilot valves (IP20)
1 1/2"	**G357APxx** **G357AQxx**	G1/8	3,6	pilot box series **110** 2 to 12 valves 1/8	series 257

SPECIFICATIONS

pipe size	orifice size	flow coefficient Kv		operating pressure differential (bar)		catalogue number	
				min	max. (PS) air		
	(mm)	(m^3/h)	(l/min)		~ / =	hose	threaded
8" Tank System							
1 1/2"	40	46	768	0,35	8	**G357APxx** (1) (2)	**G357AQxx** (1) (2)

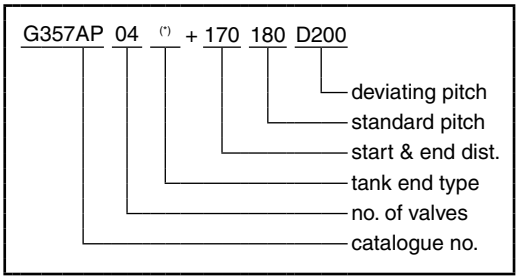
(1) *Standard tank has round ends. For flat ends use suffix FE*
(2) *xx indicates the number of valves*

ORDERING

Example: Dimension code for a 4 valves tank system:

Tank diameter	8"
Operator	Remote
Pipe size	1 1/2"
Connection	Hose (see fig. 1: Connection Type)
Number of valves	4 pcs
Start and End distance	170 mm
Standard pitch	180 mm
Deviating pitch	Between valve no. 3 and no. 4 is position D (see fig. 1) 200 mm
Catalogue number	G357AP04 24V/DC
Dimension code	170180D200

ORDERING EXAMPLE TANK SYSTEM:



SPARE PARTS KITS

catalogue number	spare parts kit no.
	~/=
G357APxx	**C113826**
G357AQxx	

DIMENSIONS (mm)

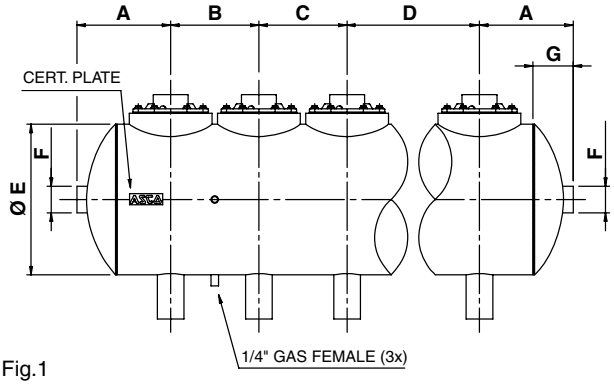
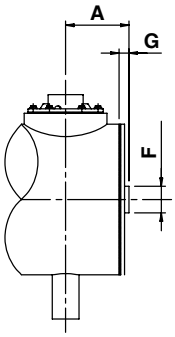
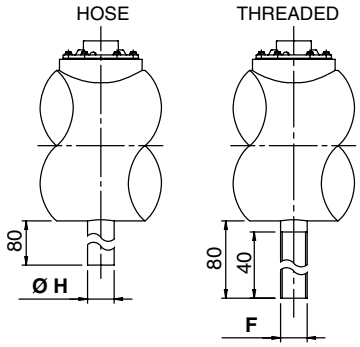


Fig.1



Flat ends (Suffix "**FE**")



Connection Type

tank diameter	fig.	A min. start distance		B / C / D minimum pitch		A min. end distance		Ø E	F	G		Ø H
		(round)	(flat)	(round)	(flat)	(round)	(flat)					
8"	1	170	118	160	160	170	118	218,1	G 1 1/2"	70	18	48,3

(✶) *For standard tank (round ends) use no suffix, for flat ends use suffix FE*

MOUNTING BRACKETS

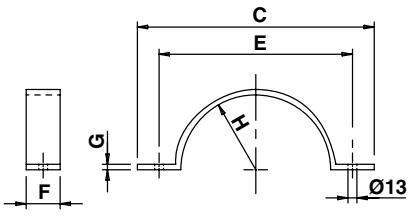


Fig.2 - Contra bracket

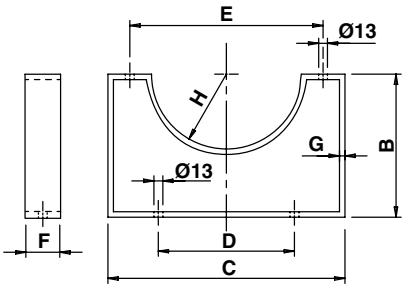


Fig.3 - Bracket

tank diameter	fig.	C	Ø E	F	G	H
8"	2	348	284	50	8	110

tank diameter	fig.	B	C	D	Ø E	F	G	H
8"	3	210	348	200	284	50	8	110

INSTALLATION

- Tank System can be mounted in any position. We can supply standard mounting brackets with each tank by specifying suffix MB behind the catalogue number (see figure 2 and 3)
- Installation / maintenance instructions and declaration of conformity are included with each tank system
- Spare part kits and coils are available