

The ASCO ARCS are specially designed redundant solution for emergency shut down valves (ON/OFF valves)⁽¹⁾ and various redundant configurations (1oo2, 2oo2 & 2oo3) to meet both safety & availability.



ASCO ARCS 2oo3 redundant solenoid valve piloting system combines the advantages of both 1oo2 & 2oo2 systems to achieve a high level of process safety and reliability.

⁽¹⁾ For fail safe application of control valves, please contact ASCO representative



Redundant Configurations

1oo2 - Redundancy built to achieve a high level of process safety

Hardware fault tolerant = 1 SIL3

2oo2 - Redundancy built to achieve high availability and prevent nuisance trips

Hardware fault tolerant = 0 SIL2

2oo3 - Redundancy built to achieve a high level of process safety and availability

Hardware fault tolerant = 1 SIL3

** 2oo3 configuration with 3 channels and 3oo4 configuration with 4 channels wiring



Solenoid Valves are Based on ASCO 327-Series, 3 Way

- Direct-acting solenoid valve technology
- Low friction = Low power = High reliability
- Reduced total cost of ownership (TCO)

Options Available

- Aluminum or stainless steel solenoid operator option including Flameproof or Intrinsically safe
- Manual operator or manual reset function
- Pressure gauge, visual indicator (stainless steel)
- Solenoid valve diagnostics (pressure or go switch options)
- Options with Ex proof and intrinsically safe wiring for pressure switches
- High flow and low temperature available



Full Range of Certifications and Approvals

327 certified for SIL applications (Exida)

Up to SIL 3 accreditation from Exida for redundant configuration

Online Maintenance

Common by pass - allows online replacement of solenoid valve

Individual isolation - 2oo2 & 2oo3 - Hot swapping that allow on-line replacement of solenoid valve while maintaining the system capability to bring the process to safe mode in the event of an emergency.

Features & Benefits

- Complete redundant solenoid valve configuration (1oo2/2oo2/2oo3)
- Compact and fully integrated module
- Direct valve-to-valve design
- Status indication & feedback
- Online maintenance-individual isolation / common bypass
- Safe & proven technology

General**Differential pressure**

1 - 10 bar [1 bar = 100kPa]

Maximum viscosity65 cSt (mm²/s)**Response times**

75 - 100 ms

Fluid	Temperature Range (TS)	Seal Materials
Dry & Non Lubricated Air	-20°C to +80°C	FPM ⁽¹⁾
	-40°C to +40°C	(F)VMQ

⁽¹⁾ Highflow limited to -10°C**Specifications**

Pipe Size	Operating Pressure	Power Level	~/=	Prefix Solenoid Options												Operation	Fluid Temperature Ts ⁽³⁾ (°C)	Material of Construction	Basic Solenoid Valve	Basic Ordering Code for Solenoid Valve		
				Exd		Ex e mb	Ex d m	Exi		Type 7/9				IP67	IP65							
NPT	Min	Max		NF/ WSNF	WSCR	JE	EM/ WSCREM	VCEF/ VCEV	NFIS/ WSNFIS	WSTIS	EV	EVHT	EVMF	EVMH	JBEF	WP/ WS	SC					
1/4"	0/1 ⁽²⁾	10	BP						•						•			Auto Reset	-20 to +120	SS316L	327G042	536408
									•						•			Auto Reset	-40 to +55	SS316L	327G052	545554
									•						•			Manual Reset	-20 to +120	SS316L	327G032	536407
				•	•	•	•								•	•	•	Auto Reset	-20 to +120	SS316L	327B202	536398
			MP	•		•	•								•	•	•	Auto Reset	-50 to +60	SS316L	327B212	545550
				•		•	•								•	•	•	Manual Reset	-20 to +120	SS316L	327B232	536401
			RP	•		•	•								•	•	•	Auto Reset	-20 to +120	Aluminium	327B203	536403
				•	•	•	•								•	•	•	Auto Reset	-20 to +120	SS316L	327B102	536397
				•	•	•	•								•	•	•	Auto Reset	-50 to +60	SS316L	327B112	545549
				•	•	•	•								•	•	•	Manual Reset	-20 to +120	SS316L	327B132	536400
				•	•	•	•								•	•	•	Manual Reset	-50 to +60	SS316L	327B182	545552
				•		•	•								•	•	•	Auto Reset	-20 to +120	SS316L	327H102	536404
				•		•	•								•	•	•	Manual Reset	-20 to +120	SS316L	327H132	536409
				•		•	•								•	•	•	Auto Reset	-50 to +60	SS316L	327H112	545555
			LP	•		•	•								•	•	•	Manual Reset	-50 to +60	SS316L	327H182	545556
				•		•	•								•	•	•	Auto Reset	-20 to +120	Aluminium	327B303	536402
				•	•	•	•								•	•	•	Auto Reset	-20 to +120	SS316L	327B302	536399
				•	•	•	•								•	•	•	Auto Reset	-50 to +60	SS316L	327B312	545551
			BP	•		•	•								•	•	•	Manual Reset	-20 to +120	SS316L	327B332	536406
				•		•	•								•	•	•	Manual Reset	-50 to +60	SS316L	327B382	545553
				•		•	•								•	•	•	Auto Reset	-20 to +120	Aluminium	327B303	536405
				•		•	•								•	•	•	Auto Reset	-20 to +60	SS316L	327H302	548533
1/2"			MP	•	•	•	•								•	•	•	Auto Reset	-10 to +90	SS316L	327A610	543587
				•	•	•	•								•	•	•	Auto Reset	-50 to +60	SS316L	327A606	543588
			RP	•	•	•	•								•	•	•	Manual Reset	-10 to +90	SS316L	327A620	543589
				•	•	•	•								•	•	•	Manual Reset	-40 to +40	SS316L	327A616	543590

⁽¹⁾ For detail specification and dimensions, please refer to ASCO representative⁽²⁾ Zero bar applicable for redundant configuration without online maintenance and diagnostic feature options only⁽³⁾ Can be limited by the operator ambient temperature range for explosion proof solenoids**Flow Rate**

Size	Function	Flow Coefficient Kv	
		(m ³ /h)	(l/m)
1/4"	1oo2	0.19	3.2
	2oo2	0.39	6.5
	2oo3	0.29	4.8
1/2"	1oo2	0.39	6.5
	2oo2	0.76	13
	2oo3	0.64	11

Explanation of Temperature Ranges of Solenoid Valves

Valve temperature range

The valve temperature range (TS) is determined by the selected seal material, the temperature range for proper operation of the valve and sometimes by the fluid (e.g. steam)

Operator ambient temperature range

The operator ambient temperature range is determined by the selected power level and the safety code

Total temperature range

The temperature range of the complete solenoid valve is determined by the limitations of both temperature range above



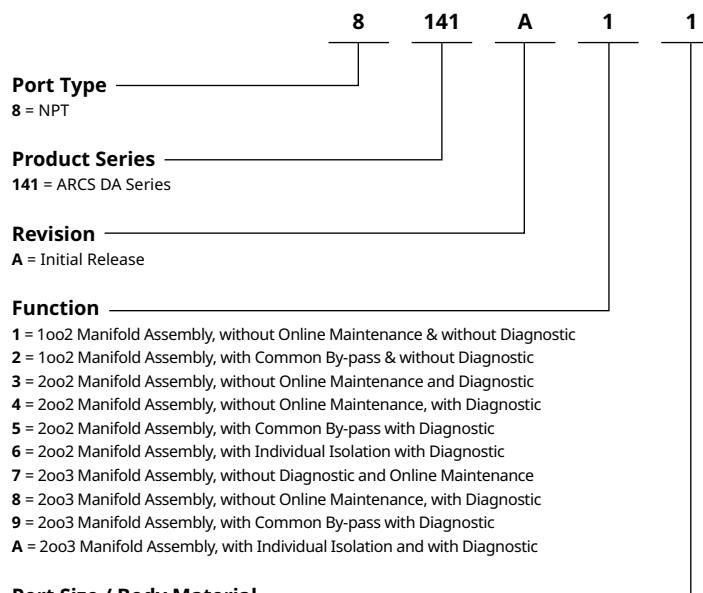
Electrical Characteristics

Prefix	Inrush (-)	Holding (~)	Power Rating		Operator Ambient Temperature Range (~°C)	Safety Code	Coil Insulation Class	Electrical Enclosure Protection (EN60529)
			(~)	Hot/Cold =				
			VA	VA	W			
Basic Power (BP)								
VCEF/VCEV	12	12	12	11.6	-40 to +52/60	II 2GD Ex db mb IIC T6/T5 Gb Ex mb tb IIIC Db	F	IP66/67, Alu, SS
EV	12	12	12	11.6	-40 to +60	Class I, Division 1, Groups A, B, C, D, Class II, Division 1, Groups E, F, G	F	Type 7/9, moulded
JBEF	12	12	12	11.6	-40 to +60	Class I, Division 1, Groups B, C, D, Class II, Division 1, Groups E, F, G	F	"Type 7/9, moulded, Alu junction box"
JE	11.2	11.2	11.2	10	-40 to +60	Ex db IIC T4 Gb, Ex tb IIIC Db	H	IP66/67, Alu
NF/WSNF	14.1	14.1	14.1	11/14	-60 to +40/60/90	II2G Ex db IIC Gb T6/T5, II2D Ex tb IIIC Db	H	IP66/67, Alu/SS
WSCR	10	10	10	9/10	-60 to +25/60/90	II2G Ex db IIC Gb T5/T4/T3, II2D Ex t IIIC Db	H	IP66/67, SS
EM	14.1	14.1	14.1	11/14	-40 to +40	II2G Ex eb mb IIC Gb T3, II2D Ex tb IIIC Db	H	IP66/67, steel
WSCREM	10	10	10	9/10	-60 to +25/60/90	II2G Ex eb mb IIC Gb T5/T4/T3, II2D Ex tb IIIC Db	H	IP66/67, SS
WP/WS	14.1	14.1	14.1	11/14	-40 to +90	EN 60730	H	IP67, steel/SS
SC	14.1	14.1	14.1	11/14	-40 to +90	EN 60730	F	IP65, moulded
Medium Power (MP)								
JE	5.8	5.8	5.8	5.7	-10 to +60	Ex db IIC T5 Gb, Ex tb IIIC Db	H	IP66/67, Alu
NF/WSNF	5.8	5.8	5.8	5.2/5.7	-60 to +60/75/90	II2G Ex db IIC Gb T6/T5/T4, II2D Ex tb IIIC Db	H	IP66/67, Alu/SS
WSCR	5.8	5.8	5.8	5.2/5.7	-60 to +40/60/90	II2G Ex db IIC Gb T6/T4/T3, II2D Ex t IIIC Db	H	IP66/67, SS
EM	5.8	5.8	5.8	5.2/5.7	-40 to +40/75/90	II2G Ex eb mb IIC Gb T5/T4, II2D Ex tb IIIC Db	H	IP66/67, steel
WSCREM	5.8	5.8	5.8	5.2/5.7	-60 to +40/60/90	II2G Ex eb mb IIC Gb T6/T4, II2D Ex tb IIIC Db	H	IP66/67, SS
WP/WS	5.8	5.8	5.8	5.2/5.7	-40 to +90	EN 60730	H	IP67, steel/SS
SC	5.8	5.8	5.8	5.2/5.7	-40 to +90	EN 60730	F	IP65, moulded
Reduced Power (RP)								
VCEF	-	-	-	3.9	-40 to +52/60	II 2GD Ex db mb IIC T6/T5 Gb Ex mb tb IIIC Db	H	IP67, Alu
JE	3.7	3.7	3.7	3.6	-40 to +60	Ex db IIC T6 Gb, Ex tb IIIC Db	H	IP66/67, Alu
NF/WSNF	3.7	3.7	3.7	3.2/3.6	-60 to +60	II2G Ex db IIC Gb T6, II2D Ex tb IIIC Db	H	IP66/67, Alu/SS
WSCR	3.7	3.7	3.7	3.2/3.6	-60 to +40/60/90	II2G Ex db IIC Gb T6/T5/T4, II2D Ex t IIIC Db	H	IP66/67, SS
EM	3.7	3.7	3.7	3.2/3.6	-40 to +40/55	II2G Ex eb mb IIC Gb T6/T5 II2D Ex tb IIIC Db	H	IP66/67, steel
WSCREM	3.7	3.7	3.7	3.2/3.6	-60 to +40/60/90	II2G Ex eb mb IIC Gb T6/T5/T4, II2D Ex tb IIIC Db	H	IP66/67, SS
WP/WS	3.7	3.7	3.7	3.2/3.6	-40 to +55	EN 60730	H	IP67, steel/SS
SC	3.7	3.7	3.7	3.2/3.6	-40 to +55	EN 60730	F	IP65, moulded
Low Power (LP)								
JE	2	2	2	1.8	-40 to +60	Ex db IIC T6 Gb, Ex tb IIIC Db	H	IP66/67, Alu
(NF/WSNF/WSCR)	1.85	1.85	1.85	1.5/1.8	-60 to +55	II2G Ex db IIC Gb T6, II2D Ex tb IIIC Db	H	IP66/67, Alu/SS
WSCREM	1.85	1.85	1.85	1.5/1.8	-60 to +55	II2G Ex eb mb IIC Gb T6, II2D Ex tb IIIC Db	H	IP66/67, SS
EV	-	-	-	2	-20 to +60	Class I, Division 1, Groups A, B, C, D, Class II, Division 1, Groups E, F, G	F	Type 7/9, moulded
EVHT	-	-	-	2.7	-20 to +90	Class I, Division 1, Groups A, B, C, D, Class II, Division 1, Groups E, F, G	H	Type 7/9, moulded
EVMF	-	-	-	2.4	-50 to +60	Class I, Division 1, Groups A, B, C, D, Class II, Division 1, Groups E, F, G	F	Type 7/9, moulded, surge suppression
EVMH	-	-	-	2.9	-20 to +90	Class I, Division 1, Groups A, B, C, D, Class II, Division 1, Groups E, F, G	H	Type 7/9, moulded, surge suppression, High Ambient
JBEF	-	-	-	2	-40 to +60	Class I, Division 1, Groups B, C, D, Class II, Division 1, Groups E, F, G	F	Type 7/9, moulded, Alu junction box
Intrinsically Safe (IS)								
(NFIS/WSNFIS/ WSCRIS)	-	-	-	0.5	-40 to +60	II2G Ex ia IIC T6 Gb, II2D Ex tb IIIC Db	H	IP66/67, Alu/SS
WSTIS	-	-	-	0.4	-20 to +60	Ex ia IIC T6 Gb, Ex t IIIC Db	H	IP66/67, SS



Electrical Connections

Code	Connection	Prefix
FN	Solenoid Housing, Die Cast Aluminum, Explosion Proof with 1/2 NPT Cable Entry, Safety Code II2G Ex db IIC Gb T6/T5/T4, II2D Ex tb IIIC Db, ATEX/IEC Ex Certified	NF
FT	Solenoid Housing, Die Cast Aluminum, Explosion Proof with M20*1.5 Cable Entry, Safety Code II2G Ex db IIC Gb T6/T5/T4, II2D Ex tb IIIC Db, ATEX/IEC Ex Certified	NFET
8E	Dual Chamber Solenoid Housing, Die Cast Aluminum, Explosion Proof with 1/2 NPT Cable Entry, Safety Code: Ex db IIC T6/T5/T4 Gb, Ex tb IIIC Db, ATEX/IEC Ex Certified	JE
8F	Dual Chamber Solenoid Housing, Die Cast Aluminum, Explosion Proof with M20 * 1.5 Cable Entry, Safety Code: Ex db IIC T6/T5/T4 Gb, Ex tb IIIC Db, ATEX/IEC Ex Certified	JEET
FS	Solenoid Housing, Stainless Steel, Explosion Proof with 1/2 NPT Cable Entry, Safety Code II2G Ex db IIC Gb T6/T5/T4, II2D Ex tb IIIC Db (WSNF-IECEx) ATEX/IEC Ex Certified	WSNF
FU	Solenoid Housing, Stainless Steel, Explosion Proof with M20 * 1.5 Cable Entry, Safety Code II2G Ex db IIC Gb T6/T5/T4, II2D Ex tb IIIC Db, (WSNF-IEC Ex) ATEX/IEC Ex Certified	WSNFET
WR	Solenoid Housing, Stainless Steel, Explosion Proof with 1/2 NPT Cable Entry, Safety Code II2G Ex db IIC Gb T6/T5/T4/T3, II2D Ex t IIIC Db, (WSCR-IEC Ex) ATEX/IEC Ex Certified	WSCR
X2	Solenoid Housing, Stainless Steel, Explosion Proof with M20 * 1.5 Cable Entry, Safety Code II2G Ex db IIC Gb T6/T5/T4/T3, II2D Ex t IIIC Db, (WSCR-IEC Ex) ATEX/IEC Ex Certified	WSCRET
F1	Solenoid Housing, Die Cast Aluminum, Intrinsically Safe with 1/2 NPT Cable Entry, Safety Code II2G Ex ia IIC Gb T6, II2D Ex tb IIIC Db (Standard Flow Only), ATEX/IEC Ex Certified	NFTIS
X1	Solenoid Housing, Die Cast Aluminum, Intrinsically Safe with M20 * 1.5 Cable Entry, Safety Code II2G Ex ia IIC Gb T6, II2D Ex tb IIIC Db (Standard Flow Only), ATEX/IEC Ex Certified	NFETIS
FV	Solenoid Housing, Stainless Steel, Intrinsically Safe with 1/2 NPT Cable Entry, Safety Code II2G Ex ia IIC Gb T6, II2D Ex tb IIIC Db (Standard Flow Only), ATEX/IEC Ex Certified	WSNFTIS
FW	Solenoid Housing, Stainless Steel, Intrinsically Safe with M20*1.5 Cable Entry, Safety Code II2G Ex ia IIC Gb T6, II2D Ex tb IIIC Db (Standard Flow Only), ATEX/IEC Ex Certified	WSNFETIS
X3	Solenoid Housing, Stainless Steel, Intrinsically Safe with 1/2 NPT Cable Entry, Safety Code: II2G Ex ia IIC Gb T6, II2D Ex tb IIIC Db (Standard Flow Only), ATEX/IEC Ex Certified	WSCRTIS
X4	Solenoid Housing, Stainless Steel, Intrinsically Safe with M20 * 1.5 Cable Entry, Safety Code: II2G Ex ia IIC Gb T6, II2D Ex tb IIIC Db (Standard Flow Only), ATEX/IEC Ex Certified	WSCRETIS
X5	Solenoid Housing, Stainless Steel, Intrinsically Safe with 1/2 NPT Cable Entry, Safety Code: Ex ia IIC Gb T6, Ex t IIIC Db (Standard Flow Only), CC0E	WSTIS
X6	Solenoid Housing, Stainless Steel, Intrinsically Safe with M20 * 1.5 Cable Entry, Safety Code: Ex ia IIC Gb T6, Ex t IIIC Db (Standard Flow Only), CCOE	WSETIS
VA	Solenoid Housing, Die Cast Aluminum, Explosion Proof with 1/2 NPT Cable Entry, Safety Code II2G Ex db mb IIC Gb T6/T5, II2D Ex mb tb IIIC Db (Standard Flow Only), Top Cable Entry, ATEX/IEC Ex Certified	VCEFAM
VB	Solenoid Housing, Die Cast Aluminum, Explosion Proof with M20*1.5 Cable Entry, Safety Code II2G Ex db mb IIC Gb T6/T5, II2D Ex mb tb IIIC Db (Standard Flow Only), Top Cable Entry, ATEX/IEC Ex Certified	VCEFAP
VJ	Solenoid Housing, Stainless Steel, Explosion Proof with 1/2 NPT Cable Entry, Safety Code II2G Ex db mb IIC Gb T6/T5, II2D Ex mb tb IIIC Db (Standard Flow Only), Top Cable Entry, ATEX/IEC Ex Certified	VCEVAM
VK	Solenoid Housing, Stainless Steel, Explosion Proof with M20*1.5 Cable Entry, Safety Code II2G Ex db mb IIC Gb T6/T5, II2D Ex mb tb IIIC Db (Standard Flow Only), Top Cable Entry, ATEX/IEC Ex Certified	VCEVAP
MV	Solenoid Housing, Steel, Increased Safety with 1/2"NPT Cable Entry, Safety Code: II2G Ex eb mb IIC Gb T6/T5/T4/T3, II2D Ex tb IIIC Db, ATEX/IEC Ex Certified	EM
MT	Solenoid Housing, Steel, Increased Safety with M20 *1.5 Cable Entry, Safety Code: II2G Ex eb mb IIC Gb T6/T5/T4/T3, II2D Ex tb IIIC Db, ATEX/IEC Ex Certified	EMT
X7	Solenoid Housing, Stainless Steel, Increased Safety with 1/2"NPT Cable Entry, Safety Code: II2G Ex eb mb IIC Gb T6/T5/T4/T3, II2D Ex tb IIIC Db, ATEX/IEC Ex Certified	WSCREM
X8	Solenoid Housing, Stainless Steel, Increased Safety with M20 *1.5 Cable Entry, Safety Code: II2G Ex eb mb IIC Gb T6/T5/T4/T3, II2D Ex tb IIIC Db, ATEX/IEC Ex Certified	WSCREMET
X9	Waterproof IP67 - with M20*1.5 Cable Gland, Metal Enclosure	WP
XA	Waterproof IP67 - M20*1.5 Cable Entry, Metal Enclosure	WPET
XC	Waterproof IP67 - with M20*1.5 Cable Gland, Stainless Steel Enclosure	WS
XD	Waterproof IP67 - M20*1.5 Cable Entry, Stainless Steel Enclosure	WSET
XE	Waterproof IP67 - 1/2"NPT Cable Entry, Metal Enclosure	WPT
XF	Waterproof IP67 - 1/2"NPT Cable Entry, Stainless Steel Enclosure	WST
S1	Spade Plug Connector (EN/IEC 60730), IP65	SC
H1	Explosionproof, Epoxy molded solenoid housing with integral ½" NPT stainless steel conduit hub and 18" leads, UL/CSA approvals, Class I Div 1 Groups A, B, C, D; Class II Div 1 Group E, F, G (UL/CSA -Solenoid only)	EV/EVHT
H6	Surge Suppression, Explosionproof, Epoxy Molded Solenoid Housing with Integral ½" NPT Stainless Steel Conduit Hub and 18" Leads, UL/CSA Approvals, Class I Div 1 Groups A, B, C, D; Class II Div 1 Group E, F, G, (UL/CSA -Solenoid Only)	EVMF/ EVMH
7N	Explosionproof Junction Box Enclosure, Die Cast Aluminum, ½" NPT Conduit Connection, UL/CSA Approvals, Class I, Div 1 Groups B, C, D; Class II, Div. 1, Groups E, F, G, (UL/CSA -Solenoid Only)	JBEF

How to Order

Port Size / Body Material
 1 = Standard Flow-Port Size 1/4" NPT - Stainless Steel 316
 2 = Standard Flow-Port Size 1/4" NPT - Aluminum
 5 = High Flow-Port Size 1/2" NPT - Stainless Steel 316

Solenoid Valve-3 Way, Direct Acting
 0 = 327B102 - Auto Reset, FPM Sealing, SS, Power 3.6/3.7W (RP)
 1 = 327B202 - Auto Reset, FPM Sealing, SS, Power 5.7/5.8W (MP)
 2 = 327B302 - Auto Reset, FPM Sealing, SS, Power 1.8W & IS 0.5W (LP)
 3 = 327B112 - Auto Reset, FVMQ Sealing (Low Temperature), SS, Power 3.6/3.7W (RP)⁽⁵⁾
 4 = 327B212 - Auto Reset, FVMQ Sealing (Low Temperature), SS, Power 5.7/5.8W (MP)⁽⁵⁾
 5 = 327B312 - Auto Reset, FVMQ Sealing (Low Temperature), SS, Power 1.8W & IS 0.5W (LP)⁽⁵⁾
 7 = 327B132 - Tamper Proof Reset, FPM Sealing, SS, Power 3.6/3.7W (RP)
 8 = 327B232 - Tamper Proof Reset, FPM Sealing, SS, Power 5.7/5.8W (MP)
 9 = 327B332 - Tamper Proof Reset, FPM Sealing, SS, Power 1.8W (LP)
 A = 327B182 - Tamper Proof Reset, FVMQ Sealing (Low Temperature), SS, Power 3.6/3.7W (RP)⁽⁵⁾
 C = 327B382 - Tamper Proof Reset, FVMQ Sealing (Low Temperature), SS, Power 1.8W (LP)⁽⁵⁾
 D = 327G042 - Auto Reset, FPM/FKM Sealing Normally Closed, Stainless Steel, Power 11.6/12W. Fluid Temperature -20°C to +120°C
 E = 327G052 - Auto Reset, (F)VMQ (Low Temperature) Sealing Normally Closed, Stainless Steel, Power 11.6/12W. Fluid Temperature -40°C to +55°C⁽⁵⁾
 F = 327G032 - Tamper Proof Reset, FPM/FKM Sealing Normally Closed, Stainless Steel, Power 11.6/12W. Fluid Temperature -20°C to +120°C
 G = 327H302 - Auto Reset, FKM Sealing Normally Closed, Stainless Steel, Power 2/2.7W. Fluid Temperature -20°C to +60°C
 V = 327H312 - Auto Reset, VMQ Sealing Normally Closed, Stainless Steel, Power 2/2.7W. Fluid Temperature -50°C to +60°C⁽⁵⁾
 H = 327H102 - Auto Reset, FPM Sealing, SS, Power 3.9W (RP)⁽⁴⁾
 J = 327H132 - Tamper Proof Reset, FPM Sealing, SS, Power 3.9W (RP)⁽⁴⁾
 K = 327H112 - Auto Reset, FVMQ Sealing (Low Temperature), SS, Power 3.9W (RP)⁽⁴⁾⁽⁵⁾
 L = 327H182 - Tamper Proof Reset, FVMQ Sealing (Low Temperature), SS, Power 3.9W (RP)⁽⁴⁾⁽⁵⁾
 M = 327B103 - Auto Reset, FPM Sealing, Aluminum, Power 3.6/3.7W (RP)⁽²⁾
 N = 327B203 - Auto Reset, FPM Sealing, Aluminum, Power 5.7/5.8W (MP)⁽²⁾
 P = 327B303 - Auto Reset, FPM Sealing, Aluminum, Power 1.8W & IS 0.5W (LP)⁽²⁾
 Q = 307B005 - Pilot Operated, Auto Reset, FPM Sealing, SS, Power IS 0.35W (LP)⁽³⁾⁽⁴⁾
 R = 327A610 - High Flow Auto Reset, FPM Sealing, SS, Power 14/14.1W (BP)⁽¹⁾
 S = 327A606 - High Flow Auto Reset, FVMQ Sealing (Low Temperature), SS, Power 10W (BP)⁽¹⁾⁽⁵⁾
 T = 327A620 - High Flow Manual Reset, FPM Sealing, SS, Power 5.7/5.8W (MP)⁽¹⁾
 U = 327A616 - High Flow Manual Reset, FVMQ Sealing (Low Temperature), SS, Power 3.6/3.7W (RP)⁽¹⁾⁽⁵⁾

⁽¹⁾ Applicable only for high flow-1/2" in port size selection
⁽²⁾ Applicable only for aluminum version in body material selection
⁽³⁾ Applicable for electrical connection type X5 and X6.
 For other specification and dimensions please contact ASCO representative
⁽⁴⁾ Applicable for electrical connection type H1
⁽⁵⁾ Selection in options list A01 & B01 are not applicable

Voltage

H3 = 12V DC	F3 = 12V DC
H1 = 24V DC	F1 = 24V DC
H9 = 48V DC	F9 = 48V DC
HJ = 110V DC	FJ = 110V DC
HD = 120V DC	FD = 120V DC
J1 = 125V DC	E1 = 125V DC
HQ = 24V/50-60HZ AC	FQ = 24V/50-60HZ AC
JY = 110V/50-60HZ AC	EY = 110V/50-60HZ AC
HC = 115V/50-60HZ AC	FC = 115V/50-60HZ AC
HA = 120V/50-60HZ AC	FA = 120V/50-60HZ AC
JV = 220V/50-60HZ AC ⁽⁶⁾	EV = 220V/50-60HZ AC ⁽⁶⁾
HH = 230V/50-60HZ AC ⁽⁶⁾	FH = 230V/50-60HZ AC ⁽⁶⁾

⁽⁶⁾ Not applicable for low and reduced power options

Option List⁽⁸⁾

A00 = No options
A01 = SS Visual Indicator
A02 = SS Pressure Gauge
B01 = Pressure Switch - Potential Free for Intrinsically Safe Wiring
B02 = Pressure Switch - Potential Free for Exproof Wiring (Flying Leads)
M01 = with Manual Override ⁽⁷⁾
D01 = INMETRO
D02 = KOSHA
D03 = CUTR
D04 = CCC/NEPSI
D05 = PESO
D09 = TS

⁽⁷⁾ Manual override M01 option applicable for auto reset solenoid valve only
⁽⁸⁾ Select options using + Example: A01+B01+D01
 For multiple options, please use online configurator on the website to generate the part number or consult ASCO representative

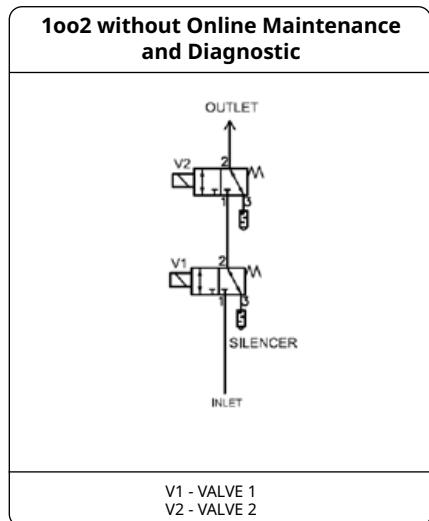
Electrical Connection Type

FN = NF	VB = VCEFAP
FT = NFET	VJ = VCEVAM
8E = JE	VK = VCEVAP
8F = JEET	H1 = EV/EVHT
FS = WSNF	H6 = EVMF/EVMH
FU = WSNFET	7N = JBEF
WR = WSCR	MV = EM
X2 = WSCRET	MT = EMT
F1 = NFTIS ⁽⁹⁾	X7 = WSCREMET
X1 = NFETIS ⁽⁹⁾	X8 = WSCREMET
FV = WSNFTIS ⁽⁹⁾	X9 = WP
FW = WSNFETIS ⁽⁹⁾	XA = WPET
X3 = WSCRITIS ⁽⁹⁾	XC = WS
X4 = WSCRETIS ⁽⁹⁾	XD = WSET
X5 = WSTIS ⁽⁹⁾	XE = WPT
X6 = WSETIS ⁽⁹⁾	XF = WST
VA = VCEFAM	S1 = SC

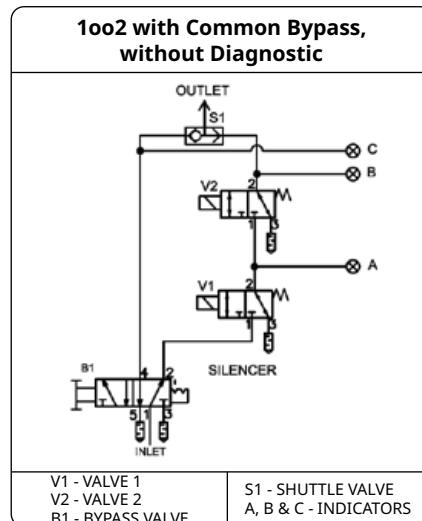
⁽⁹⁾ Intrinsically safe voltage selection restricted to 24Vdc H1 option

Disclaimer: Selection chart shown for reference.

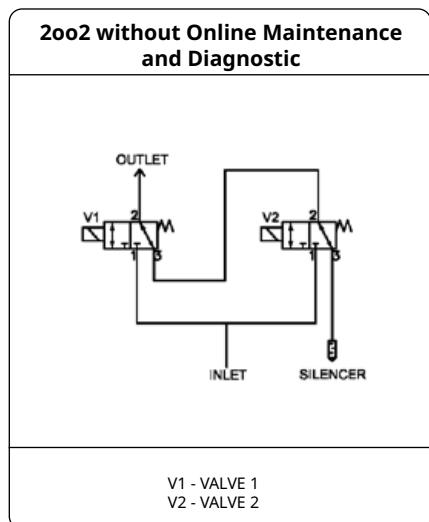
For detailed configuration/available options/other explosion proof operators, please use ARCS configurator in www.asco.com or contact local ASCO sales office.



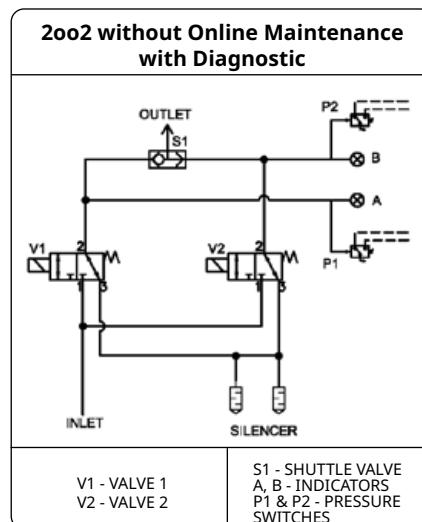
Schematic 1



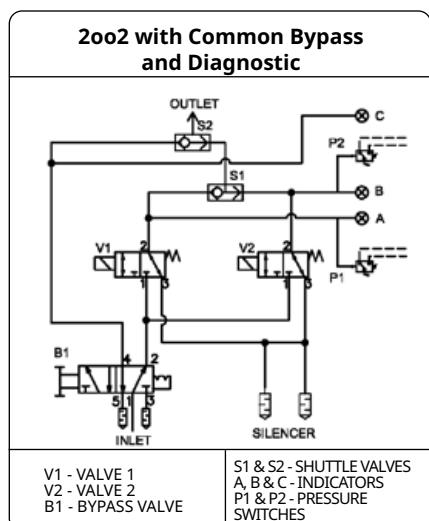
Schematic 2



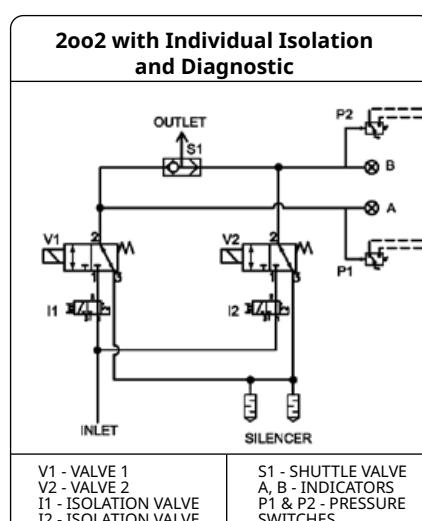
Schematic 3



Schematic 4



Schematic 5



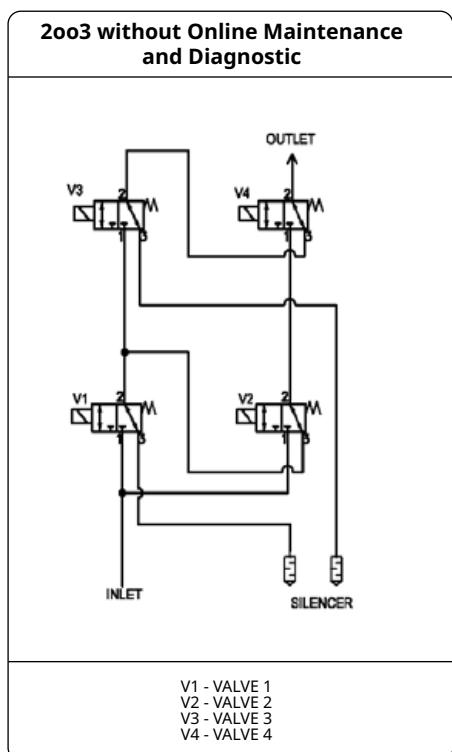
Schematic 6

1oo2 Logic Table		
CH 1	CH 2	Outlet
V1	V2	
1	1	1
1	0	0
0	1	0
0	0	0

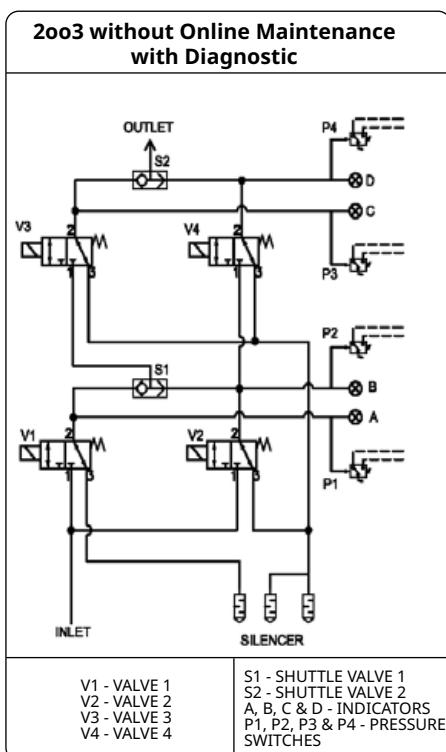
CH 1 - CHANNEL 1
CH 2 - CHANNEL 2
0 - VALVE DE-ENERGIZED
1 - VALVE ENERGIZED

2oo2 Logic Table		
CH 1	CH 2	Outlet
V1	V2	
1	1	1
1	0	1
0	1	1
0	0	0

CH 1 - CHANNEL 1
CH 2 - CHANNEL 2
0 - VALVE DE-ENERGIZED
1 - VALVE ENERGIZED



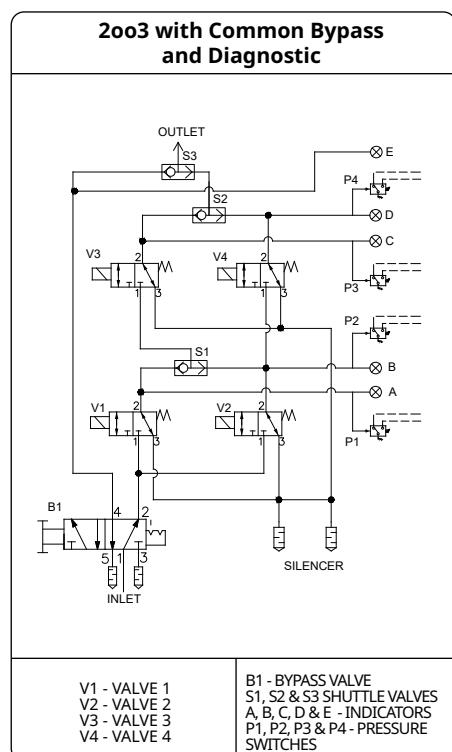
Schematic 7



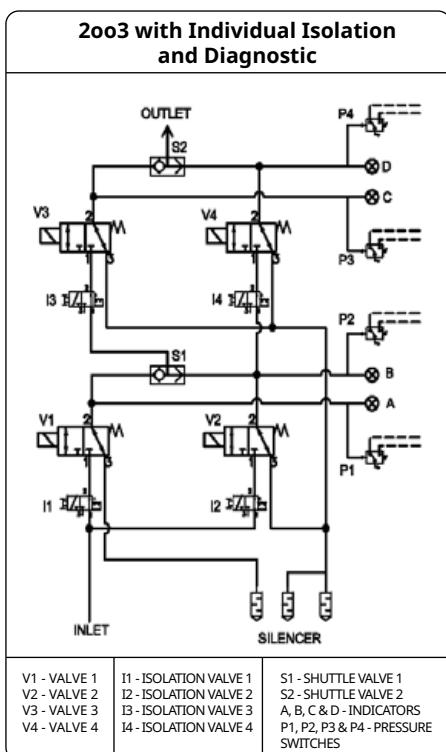
Schematic 8

Zoo3 Logic Table*			
CH 1	CH 2	CH 3	Outlet
V1	V2	V3	V4
1	0	0	0
1	1	0	0
1	1	1	0
1	1	1	1
0	1	0	0
0	1	1	0
0	1	1	1
0	1	0	1
0	0	1	0
0	0	1	1
1	0	1	1
1	0	1	0
0	0	0	1
1	0	0	1
1	1	0	1
0	0	0	0

CH 1 - CHANNEL 1
CH 2 - CHANNEL 2
CH 3 - CHANNEL 3
0 - VALVE DE-ENERGIZED
1 - VALVE ENERGIZED
* FOR SCHEMATIC - 7



Schematic 9



Schematic A

Zoo3 Logic Table*			
CH 1	CH2	CH 3	Outlet
V1	V4	V2	V3
1	0	0	0
1	0	1	0
1	0	1	1
1	1	1	1
0	0	1	0
0	0	1	1
0	1	1	1
0	1	1	0
0	0	0	1
0	1	0	1
1	1	0	1
1	0	0	1
0	1	0	0
1	1	0	0
1	1	1	0
0	0	0	0

CH 1 - CHANNEL 1
CH 2 - CHANNEL 2
CH 3 - CHANNEL 3
0 - VALVE DE-ENERGIZED
1 - VALVE ENERGIZED
* FOR SCHEMATIC - 8, 9, A

Dimensions: mm **Weight:** kg



TYPE 01:
Epoxy moulded
SC : IEC 335 / ISO 4400

327B102/202/103/203/132/232/112/212/182
327A610/606/616/620



TYPE 02:
Metal, epoxy coated / AISI 316 SS
WP / WS : IEC 335
EM / WSEM : EN/IEC 60079-7, 60079-18
EN/IEC 60079-31

327B102/202/103/203/132/232/112/212/182
327A610/606/616/620



TYPE 03:
Aluminum, epoxy coated / AISI 316L SS
NF / WSNF : EN/IEC 60079-1, 60079-31
NFIS / WSNFIS : EN/IEC 60079-11,
60079-31

327B102/202/302/103/203/303/132/232/112/212/182/312
327A610/606/616/620



TYPE 04:
AISI 316L SS
WSCR : EN/IEC 60079-0, 60079-1, 60079-31
WSCREM : EN/IEC 60079-0, 60079-7, 60079-18
: EN/IEC 60079-31
WSCRIS : EN/IEC 60079-0, 60079-11, 60079-31

327B102/202/302/332/112/312/382
327A610/606/616/620



TYPE 05:
Epoxy painted die cast aluminum/316L SS
VCEF : EN/IEC 60079-0, 60079-1,
60079-18, 60079-31
EN/ISO 80079-36
VCEV : EN/IEC 60079-1, 60079-18,
60079-31, 13463-1

327H102/132/112/182
327G032/042/052



TYPE 06:
Epoxy painted die cast aluminum
JE : EN/IEC 60079-0, 60079-1, 60079-31

327B102/B112/B302/B312/B132/B182
327A610/606/616/620



TYPE 07:
Epoxy moulded, Type 7/9
EV/EVHT : Class I, Division 1, Groups A, B, C, D,
Class II, Division 1, Groups E, F, G
EVMF/EVMH : Surge Suppression,
Class I, Division 1, Groups A, B, C, D,
Class II, Division 1, Groups E, F, G

327G032/G042/G052/H302/H312

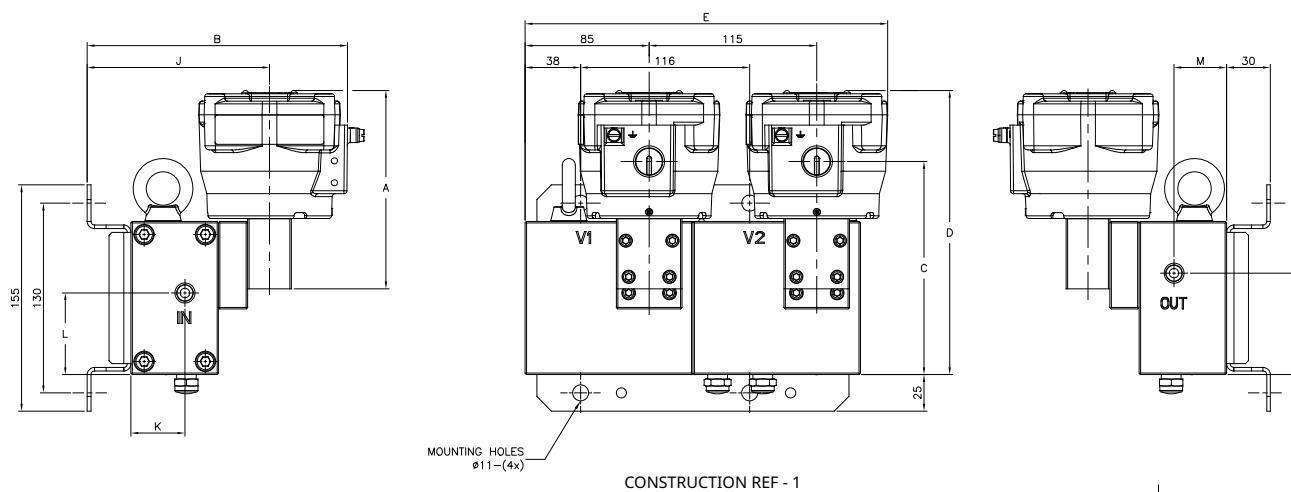


TYPE 08:
Epoxy moulded, aluminum junction box, Type 7/9
JBPF : Class I, Division 1, Groups B, C, D,
Class II, Division 1, Groups E, F, G

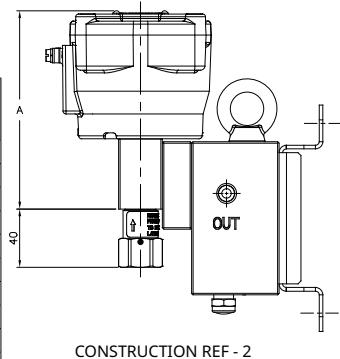
327G032/G042/G052/H302/H312

Dimensions: mm Weight: kg

1oo2 Configuration without Online Maintenance and Diagnostic

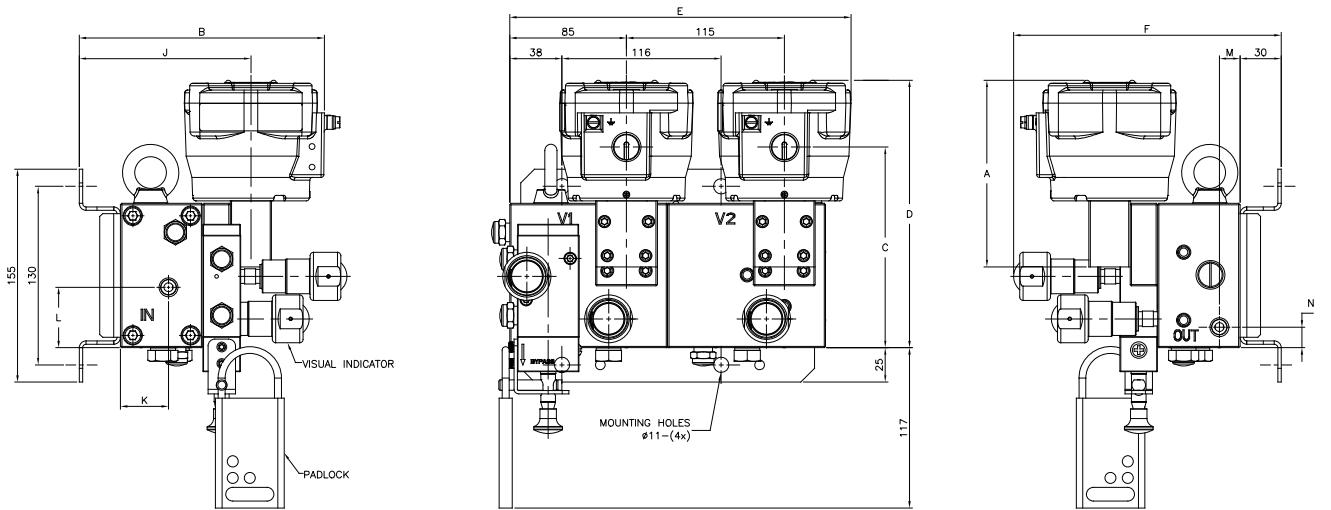


Construction Ref	Basic Catalog No.	Type	Enclosure	A	B	C	D	E	J	K	L	M	N	Approx. Weight (Kg)
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	230	125	37	56	36	70	16
		02	WP/WS/EM	112	205	-	171	239						17
		03	NF/WSNF	136	180	146	195	249						19/21
		04	WSCR/WSCREM	140	200	160	199	246						20
	327B102/112	06	JE	130	239	-	189	240						18
		03	NF/WSNF/NFIS/WSNFIS	146	180	156	205	249						19/21
	327B302/312	04	WSCR/WSCREM/WSCRIS	140	200	160	199	246						20
		06	JE	130	239	-	189	240						18
	327B103/203	01	SC	109	190	-	168	230						8
		02	WP/EM	112	205	-	171	239						8
		03	NF	136	180	146	195	249						11
	327B303	03	NF/NFIS	146	180	156	205	249						11
	327H102/112	05	VCEFAM/VCEFAP	109	230	-	168	233						17
	327G042/052	05	VCEFAM/VCEFAP/ VCEVAM/VCEVAP	109	230	-	168	233						17/18
		07	EV	99	177	133	158	230						17
		08	JBEF	118	281	134	177	244						19
	327H312/302	07	EV/EVHT/EVMF/EVMH	102	183	134	161	231						17
		08	JBEF	118	281	134	177	244						19
	327A610/606	01	SC	134	175	-	166	230						17
		02	WP/WS/EM	140	185	126	171	239						17
		03	NF/WSNF	163	160	145	194	249						18/21
		04	WSCR/WSCREM	167	180	159	198	246						20
		06	JE	147	219	-	178	240						18
		01	SC	109	190	-	168	230						16
2 (MO/MANUAL RESET)	327B132/182/232	02	WP/WS/EM	112	205	-	171	239	125	37	56	36	70	16
		03	NF/WSNF	136	180	146	195	249						17
		06	JE	130	239	-	189	240						20/22
		04	WSCR/WSCREM	140	200	160	199	246						18
	327G032	05	VCEFAM/VCEFAP/ VCEVAM/VCEVAP	109	230	-	168	233						21
		07	EV	99	177	133	158	230						17/18
		08	JBEF	118	281	134	177	244						21
	327H132/182	05	VCEFAM/VCEFAP	109	230	-	168	233						17
		01	SC	134	175	-	166	230						16
	327A620/616	03	NF/WSNF	163	160	145	194	249						19/21
		04	WSCR/WSCREM	167	180	159	198	246						20
		06	JE	147	219	-	178	240						19
		02	WP/WS/EM	140	185	126	171	239						17



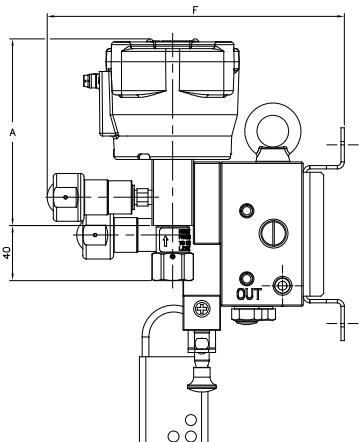
Dimensions: mm Weight: kg

1oo2 Configuration with Common Bypass, without Diagnostic



CONSTRUCTION REF - 1

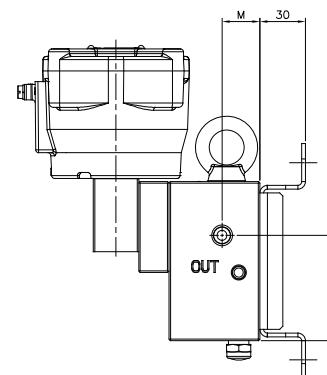
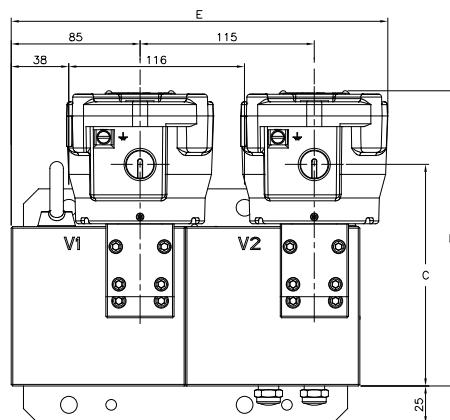
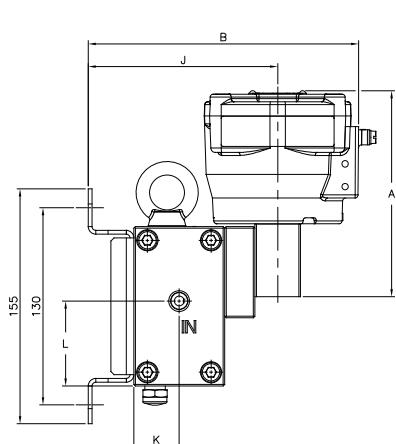
Construction Ref	Basic Catalog No.	Type	Enclosure	A	B	C	D	E	J	K	L	M	N	F	Approx. Weight (Kg)		
														Visual Indicator	Pressure Gauge		
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	230	125	35	44	15	15	195	202	18 19 21/23 22	
		02	WP/WS/EM	112	205	-	171	239									
		03	NF/WSNF	136	180	146	195	249									
		04	WSCR/WSCREM	140	200	160	199	246									
	327B302/312	06	JE	130	239	-	189	240									20 21/23 22 20
		03	NF/WSNF/NFIS/ WSNFIS	146	180	156	205	249									
		04	WSCR/WSCREM/ WSCRIS	140	200	160	199	246									
		06	JE	130	239	-	189	240									
	327B103/203	01	SC	109	190	-	168	230									10 10 10
		02	WP/EM	112	205	-	171	239									
		03	NF	136	180	146	195	249									
2 (MO/MANUAL RESET)	327B303	03	NF/NFIS	146	180	156	205	249									13 13
		05	VCEFAM/ VCEFAP	109	230	-	168	233									
	327H102/112	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233									19 19/20
		07	EV	99	177	133	158	230									
		08	JBEF	118	281	134	177	244									
		07	EV/EVHT/EVMF/ EVMH	102	183	134	161	231									
		08	JBEF	118	281	134	177	244									
	327A610/606	01	SC	134	175	-	166	230									19 19
		02	WP/WS/EM	140	185	126	171	239									
	327B132/182/232	03	NF/WSNF	163	160	145	194	249									20/23 22 20
		04	WSCR/WSCREM	167	180	159	198	246									
		06	JE	147	219	-	178	240									
		01	SC	109	190	-	168	230									
2 (MO/MANUAL RESET)	327G032	02	WP/WS/EM	112	205	-	171	239									19 22/23 20 23
		03	NF/WSNF	136	180	146	195	249									
		06	JE	130	239	-	189	240									
		04	WSCR/WSCREM	140	200	160	199	246									
		05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233									19/20 19 21
		07	EV	99	177	133	158	230									
		08	JBEF	118	281	134	177	244									
		05	VCEFAM/ VCEFAP	109	230	-	168	233									
	327H132/182	01	SC	134	175	-	166	230									19 21/23 22 21
		03	NF/WSNF	163	160	145	194	249									
		04	WSCR/WSCREM	167	180	159	198	246									
		06	JE	147	219	-	178	240									
	327A616	02	WP/WS/EM	140	185	126	171	239									19



CONSTRUCTION REF - 2

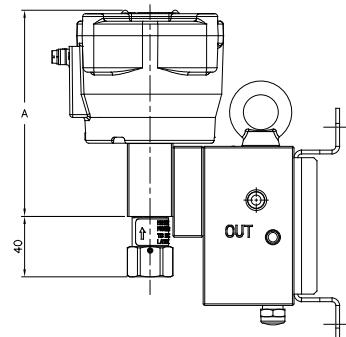
Dimensions: mm Weight: kg

Zoo2 Configuration without Online Maintenance and Diagnostic



CONSTRUCTION REF - 1

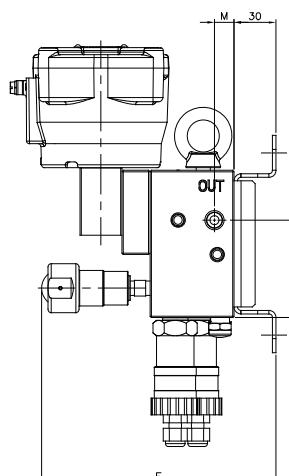
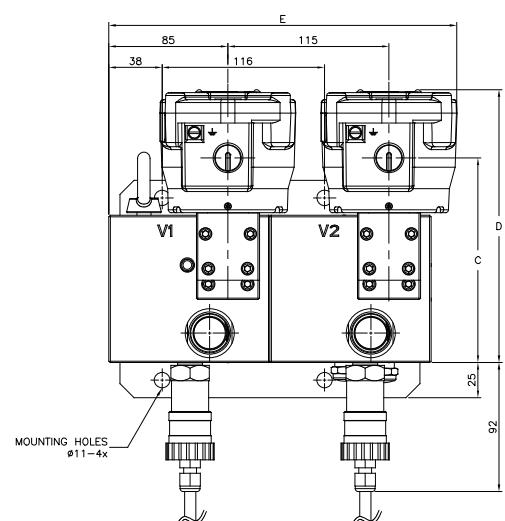
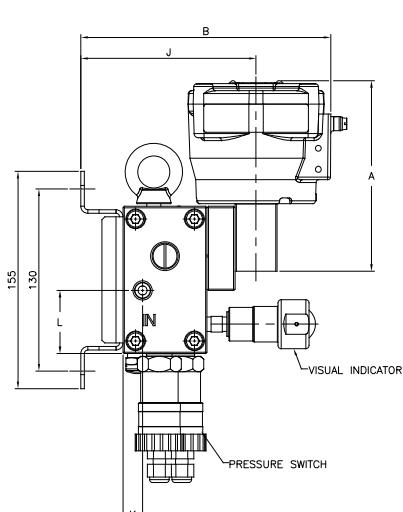
Construction Ref	Basic Catalog No.	Type	Enclosure	A	B	C	D	E	J	K	L	M	N	Approx. Weight (Kg)
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	230	125	30	56	25	70	16
		02	WP/WS/EM	112	205	-	171	239						17
		03	NF/WSNF	136	180	146	195	249						19/21
		04	WSCR/WSCREM	140	200	160	199	246						20
	327B102/112	06	JE	130	239	-	189	240						18
		03	NF/WSNF/NFIS/ WSNFIS	146	180	156	205	249						19/21
	327B302/312	04	WSCR/WSCREM/ WSCRIS	140	200	160	199	246						20
		06	JE	130	239	-	189	240						18
	327B103/203	01	SC	109	190	-	168	230						8
		02	WP/EM	112	205	-	171	239						8
		03	NF	136	180	146	195	249						11
	327B303	03	NF/NFIS	146	180	156	205	249						11
	327H102/112	05	VCEFAM/ VCEFAP	109	230	-	168	233						17
	327G042/052	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233						17/18
		07	EV	99	177	133	158	230						17
		08	JB EF	118	281	134	177	244						19
	327H312/302	07	EV/EVHT/EVMF/ EVMH	102	183	134	161	231						17
		08	JB EF	118	281	134	177	244						19
	327A610/606	01	SC	134	175	-	166	230						17
		02	WP/WS/EM	140	185	126	171	239						17
		03	NF/WSNF	163	160	145	194	249						18/21
		04	WSCR/WSCREM	167	180	159	198	246						20
		06	JE	147	219	-	178	240						18
		01	SC	109	190	-	168	230						16
2 (MO/MANUAL RESET)	327B132/182/232	02	WP/WS/EM	112	205	-	171	239	125	30	56	25	70	16
		03	NF/WSNF	136	180	146	195	249						17
		06	JE	130	239	-	189	240						20/22
	327B332/382	04	WSCR/WSCREM	140	200	160	199	246						18
	327G032	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233						21
		07	EV	99	177	133	158	230						17/18
		08	JB EF	118	281	134	177	244						17
	327H132/182	05	VCEFAM/ VCEFAP	109	230	-	168	233						19
	327A620/616	01	SC	134	175	-	166	230						16
		03	NF/WSNF	163	160	145	194	249						19/21
		04	WSCR/WSCREM	167	180	159	198	246						20
		06	JE	147	219	-	178	240						19
	327A616	02	WP/WS/EM	140	185	126	171	239						17



CONSTRUCTION REF - 2

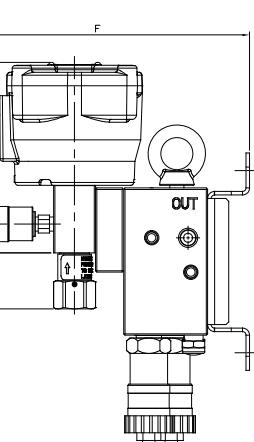
Dimensions: mm Weight: kg

Zoo2 Configuration without Online Maintenance, with Diagnostic



CONSTRUCTION REF - 1

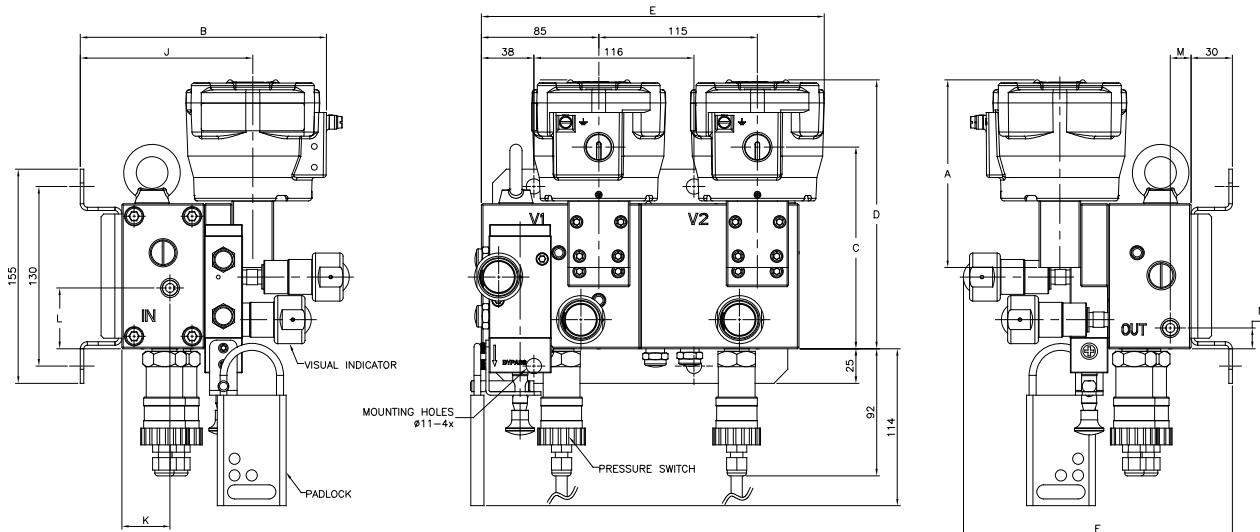
Construction Ref	Basic Catalog No.	Type	Enclosure	A	B	C	D	E	J	K	L	M	N	F		Approx. Weight (Kg)	
														Visual Indicator	Pressure Gauge		
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	230	125	14	45	14	70	167	174	17	
		02	WP/WS/EM	112	205	-	171	239									18
		03	NF/WSNF	136	180	146	195	249									20/22
		04	WSCR/WSCREM	140	200	160	199	246									21
	327B102/112	06	JE	130	239	-	189	240									19
		03	NF/WSNF/NFIS/ WSNFIS	146	180	156	205	249									20/22
		04	WSCR/WSCREM/ WSCRIS	140	200	160	199	246									21
		06	JE	130	239	-	189	240									19
	327B103/203	01	SC	109	190	-	168	230									9
		02	WP/EM	112	205	-	171	239									12
		03	NF	136	180	146	195	249									12
	327B303	03	NF/NFIS	146	180	156	205	249									18
	327H102/112	05	VCEFAM/ VCEFAP	109	230	-	168	233									18/19
	327G042/052	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233									18
		07	EV	99	177	133	158	230									20
		08	JBEF	118	281	134	177	244									18
	327H312/302	07	EV/EVHT/EVMF/ EVMH	102	183	134	161	231									20
		08	JBEF	118	281	134	177	244									18
	327A610/606	01	SC	134	175	-	166	230	105	14	51	14	68	202	181	18	
		02	WP/WS/EM	140	185	126	171	239									18
		03	NF/WSNF	163	160	145	194	249									19/22
		04	WSCR/WSCREM	167	180	159	198	246									21
		06	JE	147	219	-	178	240									19
		05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233									18
2 (MO/MANUAL RESET)	327B132/182/232	01	SC	109	190	-	168	230	125	14	45	14	70	217	224	18	
		02	WP/WS/EM	112	205	-	171	239									18
		03	NF/WSNF	136	180	146	195	249									21/23
		06	JE	130	239	-	189	240									20
	327B332/382	04	WSCR/WSCREM	140	200	160	199	246									22
		05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233									18
		07	EV	99	177	133	158	230									18
		08	JBEF	118	281	134	177	244									20
	327H132/182	05	VCEFAM/ VCEFAP	109	230	-	168	233	105	14	51	14	68	202	181	18/19	
		05	SC	134	175	-	166	230									18
	327A620/616	03	NF/WSNF	163	160	145	194	249	105	14	51	14	68	202	181	20/22	
		04	WSCR/WSCREM	167	180	159	198	246									21
		06	JE	147	219	-	178	240									20
		02	WP/WS/EM	140	185	126	171	239									18



CONSTRUCTION REF - 2

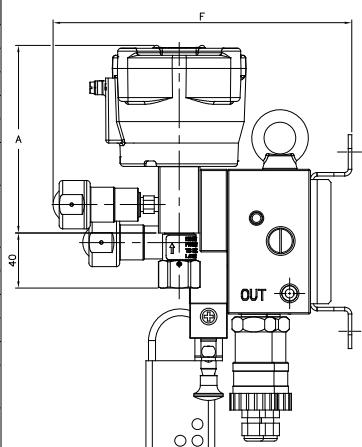
Dimensions: mm Weight: kg

Zoo2 Configuration with Common Bypass, with Diagnostic



CONSTRUCTION REF - 1

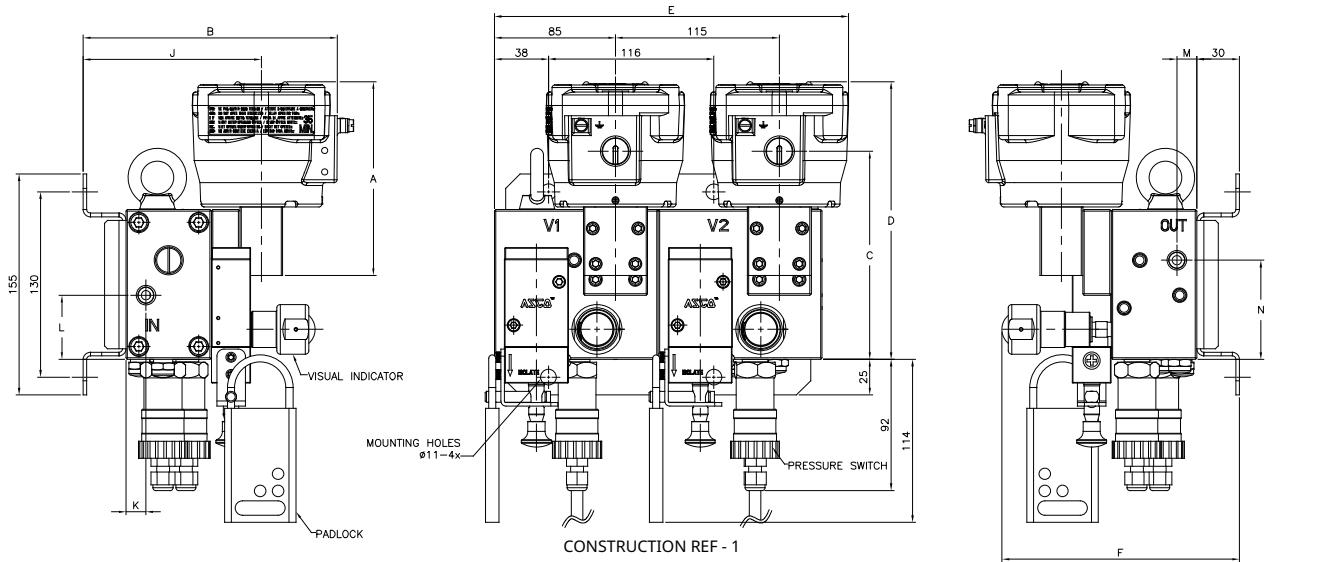
Construction Ref	Basic Catalog No.	Type	Enclosure	F										Approx. Weight (Kg)		
				A	B	C	D	E	J	K	L	M	N	Visual Indicator	Pressure Gauge	
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	230	125	35	44	15	15	195	202	18
		02	WP/WS/EM	112	205	-	171	239								19
		03	NF/WSNF	136	180	146	195	249								21/23
		04	WSCR/WSCREM	140	200	160	199	246								22
	327B102/112	06	JE	130	239	-	189	240								20
		03	NF/WSNF/NFIS/ WSNFS	146	180	156	205	249								21/23
		04	WSCR/ WSCREM/ WSCRIS	140	200	160	199	246								22
		06	JE	130	239	-	189	240								20
	327B103/203	01	SC	109	190	-	168	230								10
		02	WP/EM	112	205	-	171	239								10
		03	NF	136	180	146	195	249								13
	327B303	03	NF/NFIS	146	180	156	205	249								13
	327H102/112	05	VCEFAM/ VCEFAP	109	230	-	168	233								19
	327G042/052	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233								19/20
		07	EV	99	177	133	158	230								19
		08	JBEF	118	281	134	177	244								21
		07	EV/EVHT/EVMF/ EVMH	102	183	134	161	231								19
		08	JBEF	118	281	134	177	244								21
	327A610/606	01	SC	134	175	-	166	230								19
		02	WP/WS/EM	140	185	126	171	239								19
		03	NF/WSNF	163	160	145	194	249								20/23
		04	WSCR/WSCREM	167	180	159	198	246								22
		06	JE	147	219	-	178	240								20
		01	SC	109	190	-	168	230								18
2 (MO/MANUAL RESET)	327B132/182/232	02	WP/WS/EM	112	205	-	171	239								19
		03	NF/WSNF	136	180	146	195	249								22/24
		06	JE	130	239	-	189	240								20
		04	WSCR/WSCREM	140	200	160	199	246								23
	327G032	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233								19/20
		07	EV	99	177	133	158	230								19
		08	JBEF	118	281	134	177	244								21
		05	VCEFAM/ VCEFAP	109	230	-	168	233								19
	327H132/182	05	VCEFAM/ VCEFAP	109	230	-	168	233								19
		01	SC	134	175	-	166	230								19
		03	NF/WSNF	163	160	145	194	249								21/23
		04	WSCR/WSCREM	167	180	159	198	246								22
		06	JE	147	219	-	178	240								21
		02	WP/WS/EM	140	185	126	171	239								19



CONSTRUCTION REF - 2

Dimensions: mm Weight: kg

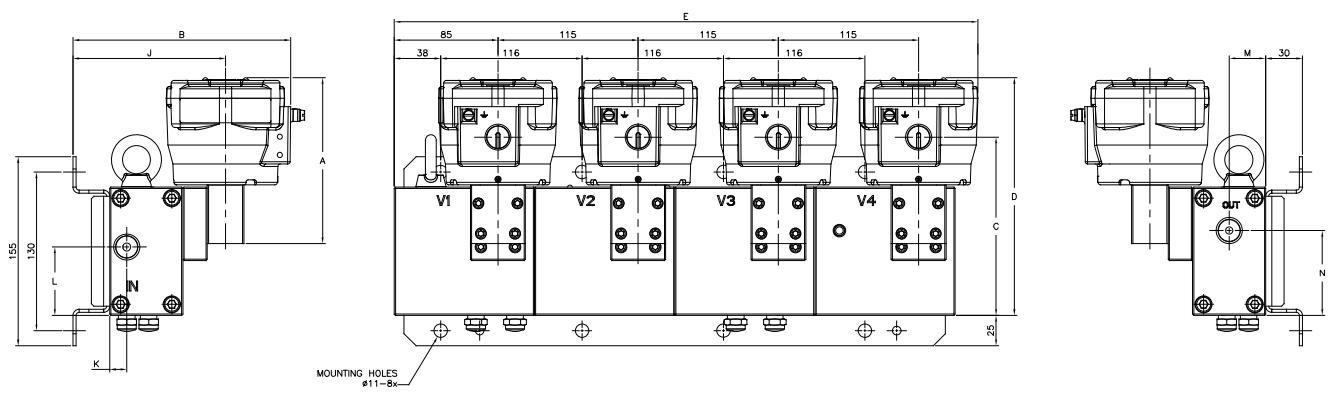
Zoo2 Configuration with Individual Isolation, with Diagnostic



Construction Ref	Basic Catalog No.	Type	Enclosure	A	B	C	D	E	J	K	L	M	N	F		Approx. Weight (Kg)	
														Visual Indicator	Pressure Gauge		
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	230	125	14	45	14	70	167	174	F	19
		02	WP/WS/EM	112	205	-	171	239									20
		03	NF/WSNF	136	180	146	195	249									22/25
		04	WSCR/WSCREM	140	200	160	199	246									23
	327B102/112	06	JE	130	239	-	189	240									21
	327B302/312	03	NF/WSNF/NFIS/ WSNFIS	146	180	156	205	249									22/24
		04	WSCR/ WSCREM/ WSCRIS	140	200	160	199	246									23
		06	JE	130	239	-	189	240									21
		01	SC	109	190	-	168	230									11
	327B103/203	02	WP/EM	112	205	-	171	239									11
	327B303	03	NF/NFIS	146	180	156	205	249									14
	327H102/112	05	VCEFAM/ VCEFAP	109	230	-	168	233									14
	327G042/052	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233									20/21
		07	EV	99	177	133	158	230									20
		08	JBEF	118	281	134	177	244									22
		07	EV/EVHT/EVMF/ EVMH	102	183	134	161	231									20
	327H312/302	08	JBEF	118	281	134	177	244									22
		01	SC	134	175	-	166	230									20
		02	WP/WS/EM	140	185	126	171	239									20
		03	NF/WSNF	163	160	145	194	249									21/24
	327A610/606	04	WSCR/WSCREM	167	180	159	198	246									23
		06	JE	147	219	-	178	240									21
		01	SC	109	190	-	168	230	105	14	45	14	68	202	181	F	20
		02	WP/WS/EM	112	205	-	171	239									20
		03	NF/WSNF	136	180	146	195	249									23/25
	327B132/182	06	JE	130	239	-	189	240									21
	327B332/382	04	WSCR/WSCREM	140	200	160	199	246									24
	327G032	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	233									20/21
		07	EV	99	177	133	158	230									20
		08	JBEF	118	281	134	177	244									22
		05	VCEFAM/ VCEFAP	109	230	-	168	233									20
	327H132/182	05	VCEFAM/ VCEFAP	109	230	-	168	233									20
	327A620/616	01	SC	134	175	-	166	230									20
		03	NF/WSNF	163	160	145	194	249									21/24
		04	WSCR/WSCREM	167	180	159	198	246									23
		06	JE	147	219	-	178	240									22
	327A616	02	WP/WS/EM	140	185	126	171	239									20

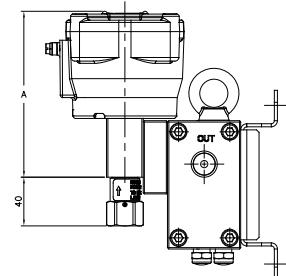
Dimensions: mm Weight: kg

2oo3 Configuration without Online Maintenance and Diagnostic



CONSTRUCTION REF - 1

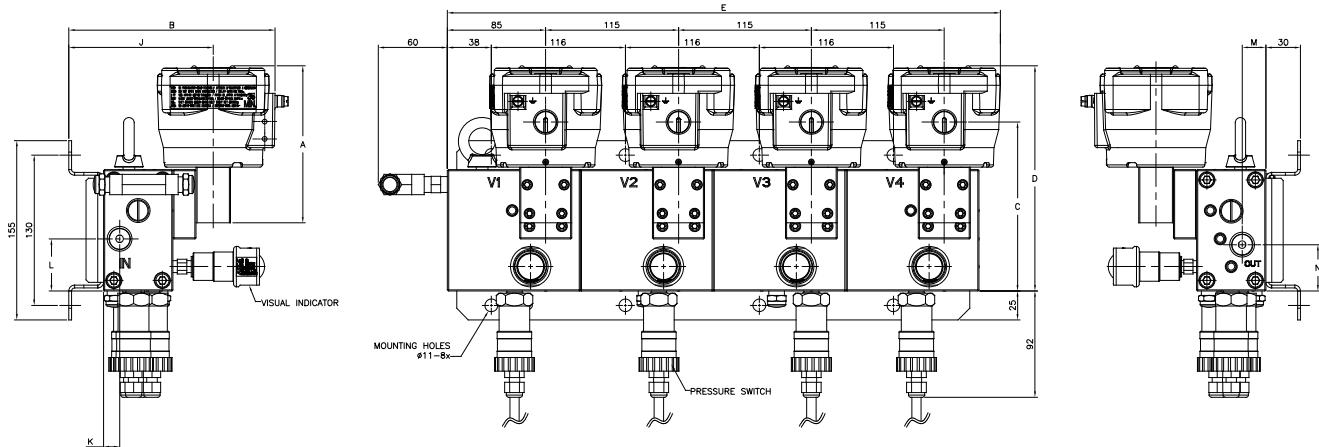
Construction Ref	Basic Catalog No.	Type	Enclosure	A	B	C	D	E	J	K	L	M	N	Approx. Weight (Kg)
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	460	125	14	56	30	70	30
		02	WP/WS/EM	112	205	-	171	469						31
		03	NF/WSNF	136	180	146	195	479						36/41
		04	WSCR/WSCREM	140	200	160	199	476						38
	327B102/112	06	JE	130	239	-	189	470						34
		03	NF/WSNF/NFIS/ WSNFIS	146	180	156	205	479						36/41
	327B302/312	04	WSCR/WSCREM/ WSCRIS	140	200	160	199	476						38
		06	JE	130	239	-	189	470						34
	327B103/203	01	SC	109	190	-	168	460						14
		02	WP/EM	112	205	-	171	469						15
		03	NF	136	180	146	195	479						21
	327B303	03	NF/NFIS	146	180	156	205	479						21
	327H102/112	05	VCEFAM/ VCEFAP	109	230	-	168	463						32
	327G042/052	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	463						32/34
		07	EV	99	177	133	158	230						30
		08	JBEF	118	281	134	177	244						35
		07	EV/EVHT/EVMF/ EVMH	102	183	134	161	231						32
		08	JBEF	118	281	134	177	244						35
	327A610/606	01	SC	134	175	-	166	460						31
		02	WP/WS/EM	140	185	126	171	469						31
		03	NF/WSNF	163	160	145	194	479						34/40
		04	WSCR/WSCREM	167	180	159	198	476						37
		06	JE	147	219	-	178	470						34
		01	SC	109	190	-	168	460						31
2 (MO/MANUAL RESET)	327B132/182/232	02	WP/WS/EM	112	205	-	171	469	125	14	56	30	70	32
		03	NF/WSNF	136	180	146	195	479						37/42
		06	JE	130	239	-	189	470						35
		04	WSCR/WSCREM	140	200	160	199	476						39
	327G032	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	463						32/34
		07	EV	99	177	133	158	230						31
		08	JBEF	118	281	134	177	244						36
		05	VCEFAM/ VCEFAP	109	230	-	168	463						32
	327H132/182	01	SC	134	175	-	166	460						32
		03	NF/WSNF	163	160	145	194	479						35/41
		04	WSCR/WSCREM	167	180	159	198	476						38
		06	JE	147	219	-	178	470						35
		02	WP/WS/EM	140	185	126	171	469						32
		01	SC	134	175	-	166	460						32



CONSTRUCTION REF - 2

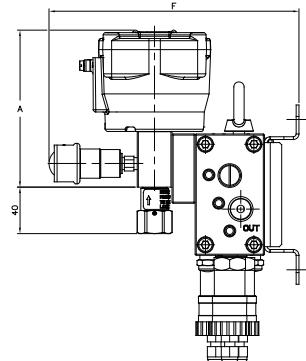
Dimensions: mm Weight: kg

2003 Configuration without Online Maintenance, with Diagnostic



CONSTRUCTION REF - 1

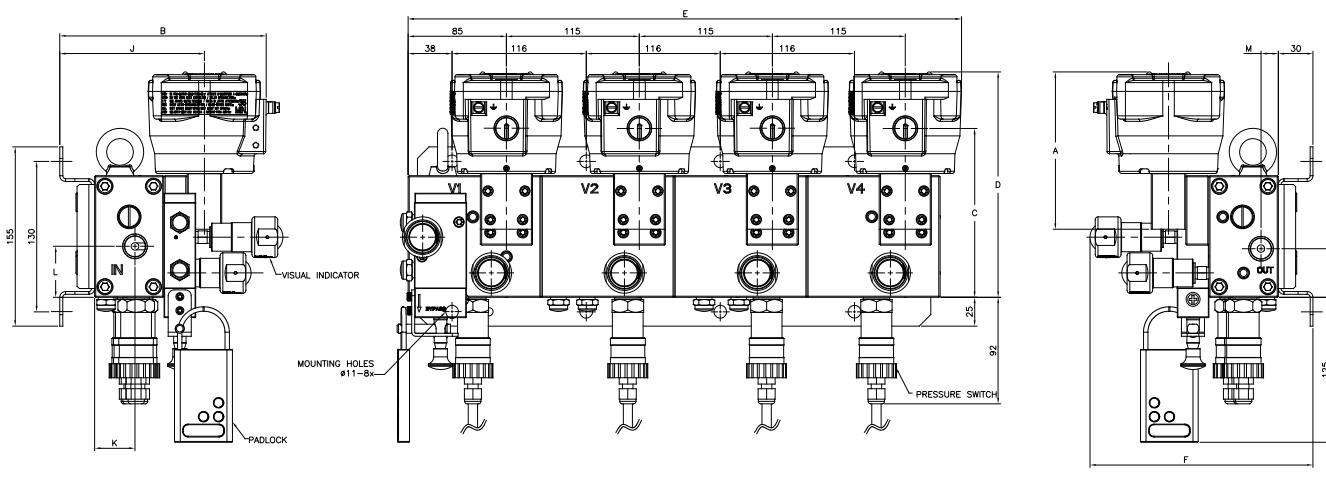
Construction Ref	Basic Catalog No.	Type	Enclosure	A	B	C	D	E	J	K	L	M	N	F		Approx. Weight (Kg)	
														Visual Indicator	Pressure Gauge		
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	460	125	14	45	21	40	167	174	33 34 39/44 41 37 39/44 41 37 17 18 24 24 35 35/37 33 38 35 38 34 34 37/43 40 37	
		02	WP/WS/EM	112	205	-	171	469									
		03	NF/WSNF	136	180	146	195	479									
		04	WSCR/WSCREM	140	200	160	199	476									
	327B102/112	06	JE	130	239	-	189	470									
		03	NF/WSNF/NFIS/ WSNFIS	146	180	156	205	479									
	327B302/312	04	WSCR/ WSCREM/ WSCRIS	140	200	160	199	476									
		06	JE	130	239	-	189	470									
	327B103/203	01	SC	109	190	-	168	460									
		02	WP/EM	112	205	-	171	469									
		03	NF	136	180	146	195	479									
	327B303	03	NF/NFIS	146	180	156	205	479									
	327H102/112	05	VCEFAM/ VCEFAP	109	230	-	168	463									
	327G042/052	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	463									
		07	EV	99	177	133	158	230									
		08	JBEF	118	281	134	177	244									
	327H312/302	07	EV/EVHT/EVMF/ EVMH	102	183	134	161	231									
		08	JBEF	118	281	134	177	244									
	327A610/606	01	SC	134	175	-	166	460									
		02	WP/WS/EM	140	185	126	171	469									
		03	NF/WSNF	163	160	145	194	479									
		04	WSCR/WSCREM	167	180	159	198	476									
		06	JE	147	219	-	178	470									
		01	SC	109	190	-	168	460									
2 (MO/MANUAL RESET)	327B132/182/232	02	WP/WS/EM	112	205	-	171	469	105	14	51	15	68	202	181	34 35 40/45 38 42 35/37 34 39 35 35 38/44 41 38 35	
		03	NF/WSNF	136	180	146	195	479									
		06	JE	130	239	-	189	470									
		04	WSCR/WSCREM	140	200	160	199	476									
	327G032	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	463									
		07	EV	99	177	133	158	230									
		08	JBEF	118	281	134	177	244									
	327H132/182	05	VCEFAM/ VCEFAP	109	230	-	168	463									
	327A620/616	01	SC	134	175	-	166	460									
		03	NF/WSNF	163	160	145	194	479									
		04	WSCR/WSCREM	167	180	159	198	476									
		06	JE	147	219	-	178	470									
		02	WP/WS/EM	140	185	126	171	469									



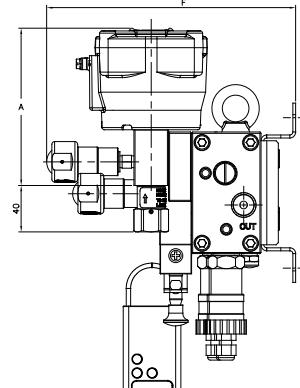
CONSTRUCTION REF - 2

Dimensions: mm Weight: kg

2oo3 Configuration with Common Bypass, with Diagnostic

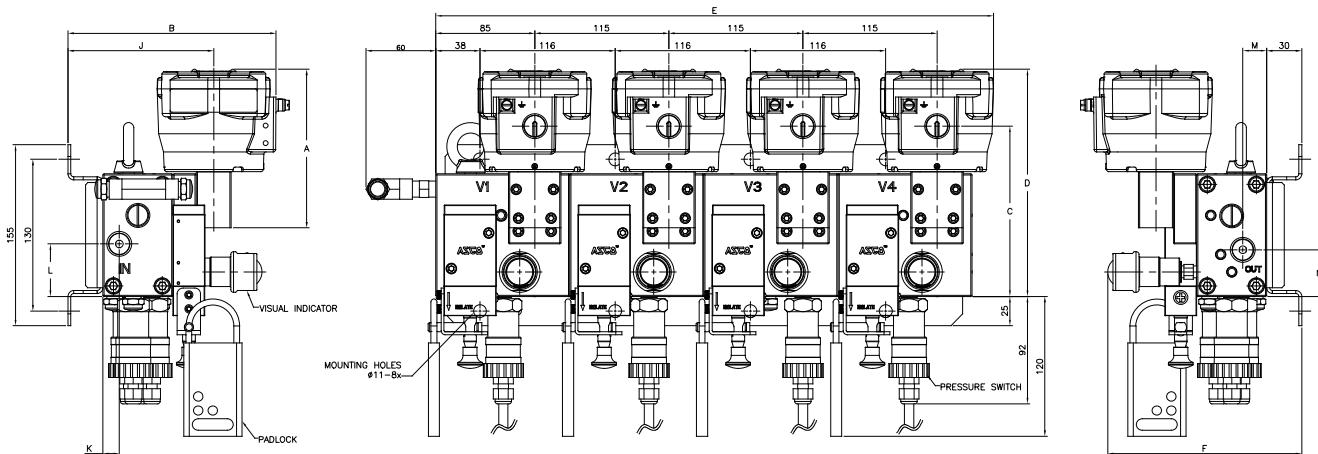


Construction Ref	Basic Catalog No.	Type	Enclosure	A	B	C	D	E	J	K	L	M	N	F		Approx. Weight (Kg)	
														Visual Indicator	Pressure Gauge		
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	460	125	35	44	14	43	195	202	36/38	
		02	WP/WS/EM	112	205	-	171	469									34
		03	NF/WSNF	136	180	146	195	479									35
		04	WSCR/WSCREM/ WSCRIS	140	200	160	199	476									40/45
	327B302/312	06	JE	130	239	-	189	470									42
		03	NF/WSNF/NFIS/ WSNFIS	146	180	156	205	479									38
		04	WSCR/WSCREM/ WSCRIS	140	200	160	199	476									40/45
		06	JE	130	239	-	189	470									42
	327B103/203	01	SC	109	190	-	168	460									40
		02	WP/EM	112	205	-	171	469									18
		03	NF	136	180	146	195	479									19
		05	VCEFAM/VCEFAP	109	230	-	168	463									25
	327B303	03	NF/NFIS	146	180	156	205	479									25
		05	VCEFAM/VCEFAP	109	230	-	168	463									36
		05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	463									36/38
		07	EV	99	177	133	158	230									34
	327H312/302	08	JBEF	118	281	134	177	244									39
		07	EV/EVHT/EVMF/ EVMH	102	183	134	161	231									36
		08	JBEF	118	281	134	177	244									39
		01	SC	134	175	-	166	460									35
	327A610/606	02	WP/WS/EM	140	185	126	171	469									35
		03	NF/WSNF	163	160	145	194	479									38/44
		04	WSCR/WSCREM	167	180	159	198	476									41
		06	JE	147	219	-	178	470									38
		01	SC	109	190	-	168	460									35
2 (MO/MANUAL RESET)	327B132/182/232	02	WP/WS/EM	112	205	-	171	469	105	32	34	21	42	202	181	36/38	
		03	NF/WSNF	136	180	146	195	479									36
		06	JE	130	239	-	189	470									41/46
		04	WSCR/WSCREM	140	200	160	199	476									39
	327G032	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	463									43
		07	EV	99	177	133	158	230									36/38
		08	JBEF	118	281	134	177	244									35
		05	VCEFAM/VCEFAP	109	230	-	168	463									40
	327H132/182	05	VCEFAM/VCEFAP	109	230	-	168	463									36
		01	SC	134	175	-	166	460									36
		03	NF/WSNF	163	160	145	194	479									39/45
		04	WSCR/WSCREM	167	180	159	198	476									42
		06	JE	147	219	-	178	470									39
	327A616	02	WP/WS/EM	140	185	126	171	469									36



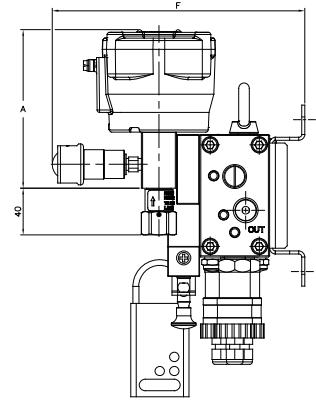
Dimensions: mm Weight: kg

2003 Configuration with Individual Isolation, with Diagnostic



CONSTRUCTION REF - 1

Construction Ref	Basic Catalog No.	Type	Enclosure	A	B	C	D	E	J	K	L	M	N	F		Approx. Weight (kg)	
														Visual Indicator	Pressure Gauge		
1 (AUTO RESET)	327B102/112/ 202/212	01	SC	109	190	-	168	460									36
		02	WP/WS/EM	112	205	-	171	469									37
		03	NF/WSNF	136	180	146	195	479									42/47
		04	WSCR/WSCREM	140	200	160	199	476									44
	327B102/112	06	JE	130	239	-	189	470									40
	327B302/312	03	NF/WSNF/NFIS/ WSNFIS	146	180	156	205	479									42/47
		04	WSCR/ WSCREM/ WSCRIS	140	200	160	199	476									44
		06	JE	130	239	-	189	470									42
		01	SC	109	190	-	168	460									20
	327B103/203	02	WP/EM	112	205	-	171	469									21
	327B303	03	NF/NFIS	146	180	156	205	479									27
	327H102/112	05	VCEFAM/ VCEFAP	109	230	-	168	463									27
	327G042/052	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	463									38
		07	EV	99	177	133	158	230									38/40
		08	JBEF	118	281	134	177	244									36
		07	EV/EVHT/EVMF/ EVMH	102	183	134	161	231									41
	327H312/302	08	JBEF	118	281	134	177	244									41
	327A610/606	01	SC	134	175	-	166	460									37
		02	WP/WS/EM	140	185	126	171	469									37
		03	NF/WSNF	163	160	145	194	479									40/46
		04	WSCR/WSCREM	167	180	159	198	476									43
		06	JE	147	219	-	178	470									40
		01	SC	109	190	-	168	460									37
2 (MO/MANUAL RESET)	327B132/182/232	02	WP/WS/EM	112	205	-	171	469									38
		03	NF/WSNF	136	180	146	195	479									43/48
		06	JE	130	239	-	189	470									41
		04	WSCR/WSCREM	140	200	160	199	476									45
	327G032	05	VCEFAM/ VCEFAP/ VCEVAM/ VCEVAP	109	230	-	168	463									38/40
		07	EV	99	177	133	158	230									37
		08	JBEF	118	281	134	177	244									42
		05	VCEFAM/ VCEFAP	109	230	-	168	463									38
	327H132/182	05	VCEFAM/ VCEFAP	109	230	-	168	463									38
		01	SC	134	175	-	166	460									41/47
		03	NF/WSNF	163	160	145	194	479									44
		04	WSCR/WSCREM	167	180	159	198	476									41
		06	JE	147	219	-	178	470									38
	327A616	02	WP/WS/EM	140	185	126	171	469									38



CONSTRUCTION REF - 2

Spares Code**Solenoid Valve**

Description: ASCO 327 series, 3/2 way, direct acting, normally closed, 5.7mm/12mm orifice, stainless steel 316/aluminum

Special Mounting for 141 Series _____

X

Valve Series _____

327
307

Ordering Code _____

536397 = 327B102 Basic Catalog
 536398 = 327B202 Basic Catalog
 536399 = 327B302 Basic Catalog
 536400 = 327B132 Basic Catalog
 536401 = 327B232 Basic Catalog
 536402 = 327B103 Basic Catalog
 536403 = 327B203 Basic Catalog
 536404 = 327H102 Basic Catalog
 536405 = 327B303 Basic Catalog
 536406 = 327B332 Basic Catalog
 536407 = 327G032 Basic Catalog
 536408 = 327G042 Basic Catalog
 536409 = 327H132 Basic Catalog
 545549 = 327B112 Basic Catalog
 545550 = 327B212 Basic Catalog
 545551 = 327B312 Basic Catalog
 545552 = 327B182 Basic Catalog
 545553 = 327B382 Basic Catalog
 545554 = 327G052 Basic Catalog
 545555 = 327H112 Basic Catalog
 545556 = 327H182 Basic Catalog
 548533 = 327H302 Basic Catalog
 548534 = 327H312 Basic Catalog
 543587 = 327A610 Basic Catalog (High Flow)
 543588 = 327A606 Basic Catalog (High Flow)
 543589 = 327A620 Basic Catalog (High Flow)
 543590 = 327A616 Basic Catalog (High Flow)
 503838 = 307B005⁽¹⁾ Basic Catalog

⁽¹⁾ Selection of base catalog no. 307B005 will restrict to the voltage code H1 and solenoid operator codes WSTIS/WSETIS

X	327	536397	001	H1
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Voltage

H1 = 24V DC
 H3 = 12V DC
 H9 = 48V DC
 HJ = 110V DC
 HD = 120V DC
 J1 = 125V DC
 HQ = 24V/50-60HZ AC
 JY = 110V/50-60HZ AC
 HC = 115V/50-60HZ AC
 HA = 120V/50-60HZ AC
 JV = 220V/50-60HZ AC⁽²⁾
 HH = 230V/50-60HZ AC⁽²⁾
 F1 = 24V DC
 F3 = 12V DC
 F9 = 48V DC
 FJ = 110V DC
 FD = 120V DC
 E1 = 125V DC
 FQ = 24V/50-60HZ AC
 EY = 110V/50-60HZ AC
 FC = 115V/50-60HZ AC
 FA = 120V/50-60HZ AC
 EV = 220V/50-60HZ AC⁽²⁾
 FH = 230V/50-60HZ AC⁽²⁾

⁽²⁾ Not applicable for low and reduced power options

**Electrical Connection/
Enclosure Protection⁽³⁾⁽⁴⁾**

*** = Three digit code for applicable Electrical connection and other options

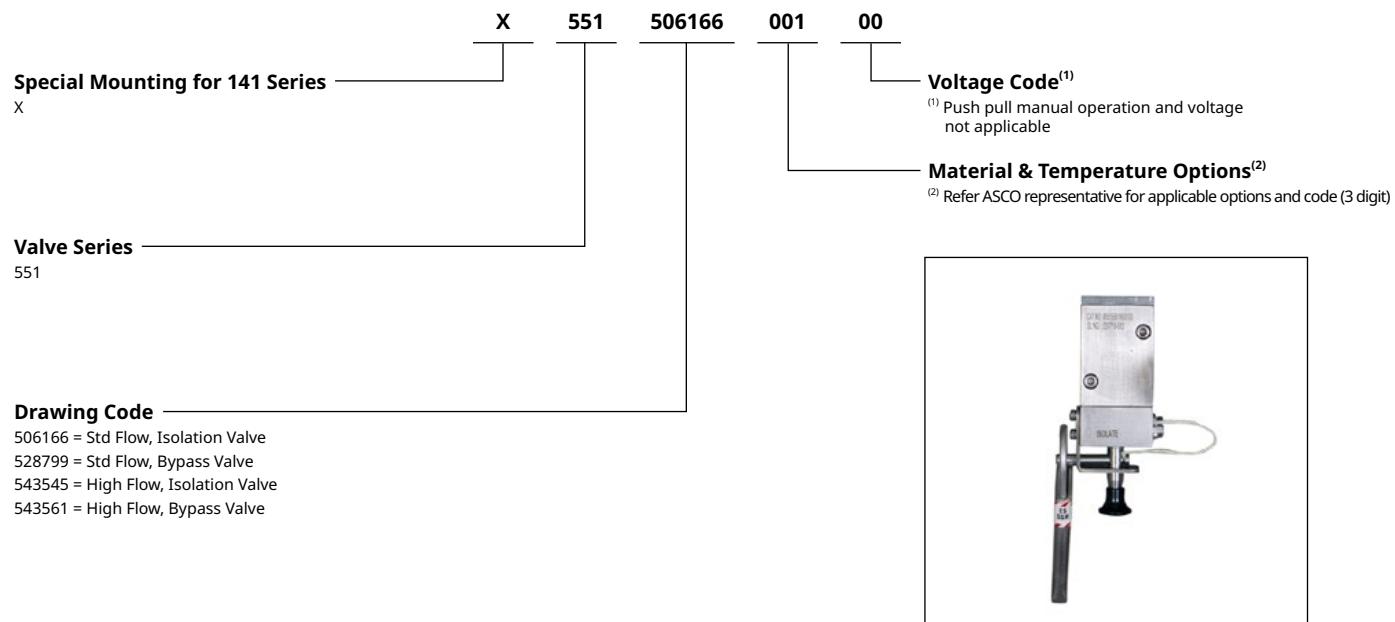
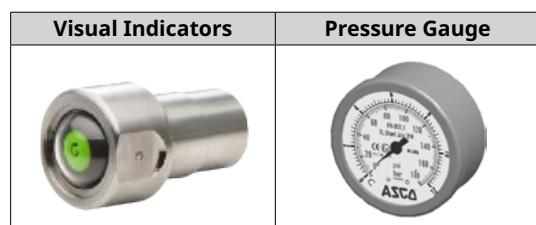
⁽³⁾ Refer ASCO representative for applicable electrical connection/enclosure protection and code (3 digit)

⁽⁴⁾ Refer solenoid operator chart



Spares Code**3 Way Push-Pull Manual Valve with LOTO**

Description: ASCO 551 series, 3/2 way, manual push button operated, normally closed, with 6 & 8mm orifice, stainless steel 316 and lock out tag out for tamper proof lock arrangement. Used for common by pass in 1oo2, 2oo2 & 2oo3 and individual isolation in 2oo2 & 2oo3

**Accessories****ARCS - Customised Solutions****Accessories - Spares Code**

Ordering Code	Item Description	Temperature Range
C325937	Pressure gauge (full stainless steel)	-40°C to +90°C
508133-010	Visual indicator (full stainless steel)	-23°C to +95°C
508133-005*	Visual indicator (full stainless steel)	-23°C to +95°C
509123-003	Pressure switch (weatherproof & intrinsically safe wiring)	-20°C to +80°C
509123-004	Pressure switch (explosion proof wiring: flying leads)	-40°C to +90°C

*Only applicable for solenoid valve "Q" selection. (Refer to pg.5 for details)



ASCO is also able to offer customized solutions to meet specific redundancy requirements, complete with options to integrate valve automation accessories like filter regulators, pilot operated valves, junction boxes for switches (feedback wiring), visual indicators, gauges and more. Available in open frame or explosion proof enclosures (Exia, Exe and Exd protection).