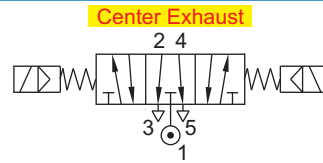
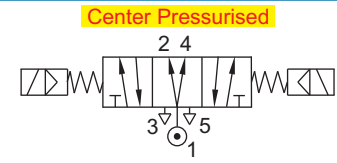


# 5/3 CENTER EXHAUST/ PRESSURISED, POPPET SOLENOID VALVE

TYPE	PRESSURE
51416	2 - 10 bar



TYPE	PRESSURE
51420	2 - 10 bar



## FEATURES

- Bubble tight shut off
- Mounts in any position
- Vibration resistance up to 9g
- Suitable for high speed cycling
- Speed up to 600 cycles/ min
- Life >10 million cycles

## WETTED PARTS

Code	※	B1	B2	B5
Body	Anodized Aluminium	Anodized Aluminium	Brass	SS 316
Internals	Aluminium, Brass and SS 316	SS 316	Brass and SS 316	SS 316
Guide Assembly	SS 304			
Shadow-Ring	Copper/ Silver/ None			
Plunger, Insert	SS 430			
Spring	SS 302			
Seat, Seals	NBR, Viton, F.Silicon			
Fasteners	SS 304			

## AMBIENT AND FLUID TEMPERATURE

-30 °C to 75 °C

## SPECIAL VERSION AND SUFFIX

Suffix (valve) AM  
Special version (Solenoid) CO, FR, SS, III

## MEDIA

Air, Inert Gases

## APPLICATION

Double acting actuator/ Cylinder, control valve promotional actuation. Air motor operation

## PORT CONNECTION

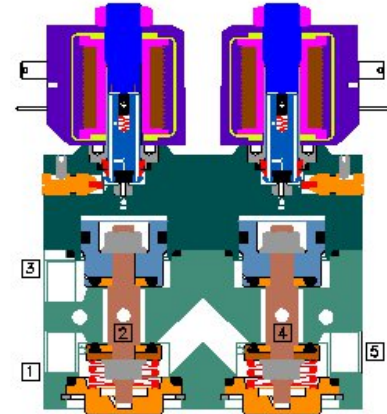
INLET	OUTLET	OUTLET	EXHAUST	EXHAUST	PILOT EXHAUST
1	2	4	3	5	6

Contact Rotex for

- Any other ambient, fluid temperature, media and application
- UL listed, Listed general purpose Valve
- Media like Water, Light Oil etc.



The pressure drop at inlet port causes malfunction of the Valve. All equipment connected between the header and the inlet port should have a higher orifice compared to the solenoid Valve.



## SPARES

(Refer page 25 for ordering code)

SPARE KIT	CODE
Seal Kit : Oring Set and Plunger Assembly	98
Repair Kit : Oring Set, Plunger Assembly, Fastener, Springs, Manual Override, Guide Assembly, Piston Kit	99
Solenoid Kit : Solenoid, Gasket and Nut	34

## APPROVAL

(★ applied for)

Approval	TYPE 4X, 6P	IP67	Ex d IIC T4 or T5 or T6 IP66	Ex ia IIC T6 IP67	DGMS	CCOE
		✓	✓	✓	✓	✓
CE		✓	✓	✓		
UL	✓		*			
			✓	✓		
EAC			✓	✓		
			✓	✓		



# 5/3 CENTER EXHAUST/ PRESSURISED, POPPET SOLENOID VALVE

## SPECIFICATION

SIZE	PORT CONNECTION		PRE-SSURE bar		ORIFICE (mm)	FLOW FACTOR Kv (LPM OF WATER @ 1 bar ΔP)	VALVE TYPE	PILOT PRESSURE	BODY MATERIAL AND INTERNALS						SEALS				MANUAL OVERRIDE		SOLENOID ENCLOSURE		SUFFIX		POWER VA		CONSTRUCTION REFERENCE NUMBER
	BSP(F)	NPT(F)	MINIMUM	MAXIMUM					ALUMINIUM	ALUMINIUM + SS	BRASS (STD. PORT NPT)	SS 316/ CF8 (STD. PORT NPT)	NBR	Viton	EPDM	HYTREL	F. Silicon	NIL	STAYPUT CUM MOMENTARY	MOMENTARY	FLYING LEAD	PLUG IN, IP67	SQ. PLUG IN, IP67	TERMINAL BOX IP67	EXPLOSION PROOF IIC, IP67	LARGE ENCLOSURE	

### 5/3 CENTER, EXHAUST POPPET SOLENOID VALVE

1/4"	2G	2R	2	10	6	12	51416		*	B2	B5	*	S2		S19	M0	*	22		T	E	14		✓	18	12	8	574
3/8"	3G	3R	2	10	10	38	51416		*	B2	B5	*	S2		S19	M0	*	22	25	T	E	III	14	✓	18	12	8	575
1/2"	4G	4R	2	10	16	75	51416		*	B2	B5	*	S2		S19	M0	*	22	25	T	E	III	14	✓	18	12	8	576
3/4"	6G	6R	3	10	20	110	51416		*		B5	*	S2		S19	M0	*	22	25	T	E	III	14	✓	18	12	8	577
1"	8G	8R	3	10	25	185	51416		*		B5	*	S2		S19	M0	*	22	25	T	E	III	14	✓	18	12	8	578

### 5/3 CENTER, PRESURISED POPPET SOLENOID VALVE

1/4"	2G	2R	2	10	6	12	51420		*	B2	B5	*	S2			M0	*	22		T	E	14		✓	18	12	8	574
3/8"	3G	3R	2	10	10	38	51420		*	B2	B5	*	S2			M0	*	22	25	T	E	III	14	✓	18	12	8	575
1/2"	4G	4R	2	10	16	75	51420		*	B2	B5	*	S2			M0	*	22	25	T	E	III	14	✓	18	12	8	576
3/4"	6G	6R	3	10	20	110	51420		*		B5	*	S2			M0	*	22	25	T	E	III	14	✓	18	12	8	577
1"	8G	8R	3	10	25	185	51420		*		B5	*	S2			M0	*	22	25	T	E	III	14	✓	18	12	8	578

Cable Entry	T	E	
		Öc/Ä	Öc/Ä a
M20 x 1.5	FJ	ii	ii
M25 x 1.5		ii	ii
1/2" NPT	Fi	ii	ii

\* = Do not specify when opted for. Refer Page # 22 for Value of \*  
 ✓ = Options available

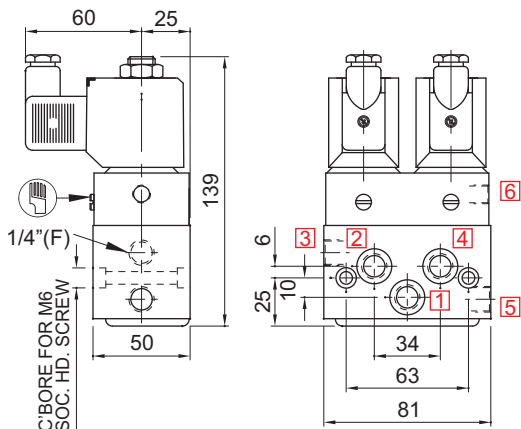
## ORDERING CODE AND EXAMPLE VALVE + SOLENOID

TYPE - SUFFIX - ORIFICE - PORT CONNECTION - BODY AND INTERNALS - MANUAL OVERRIDE - SEAL + SIZE - VOLTAGE - CURRENT - SOLENOID ENCLOSURE - APPROVAL - INSULATION - SPECIAL VERSION  
 e.g. 51416-10-3G-S2-MO+24V DC-22

## DIMENSIONS

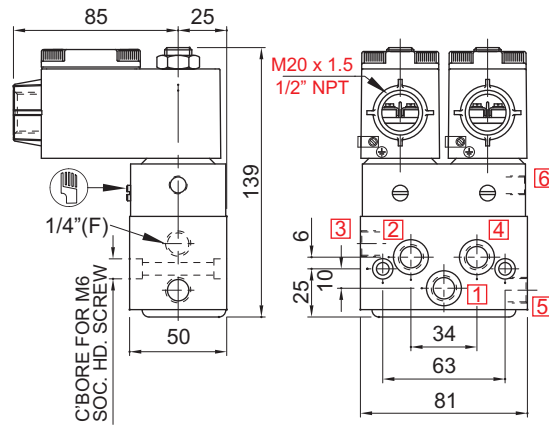
All Dimensions are in mm

### CONSTRUCTION REFERENCE : 574



PLUG IN SOLENOID TYPE 22

### CONSTRUCTION REFERENCE : 574



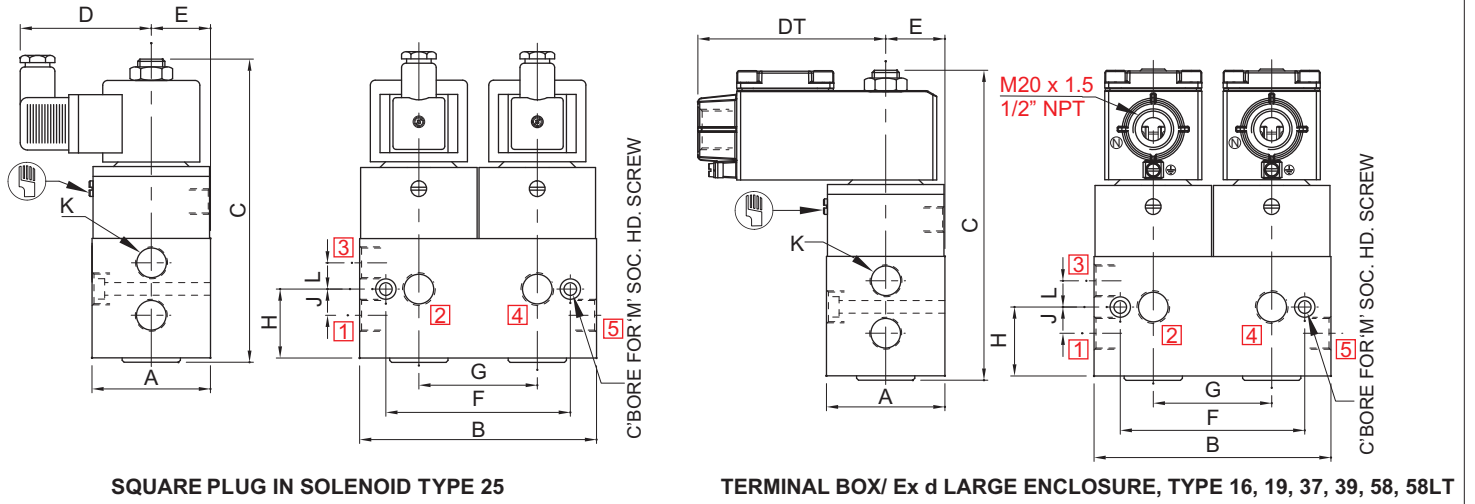
TERMINAL BOX/ Ex d TYPE 16, 19, 37, 39, 58, 58LT



# 5/3 CENTER EXHAUST/ PRESSURISED, POPPET SOLENOID VALVE

## DIMENSIONS

All Dimensions are in mm



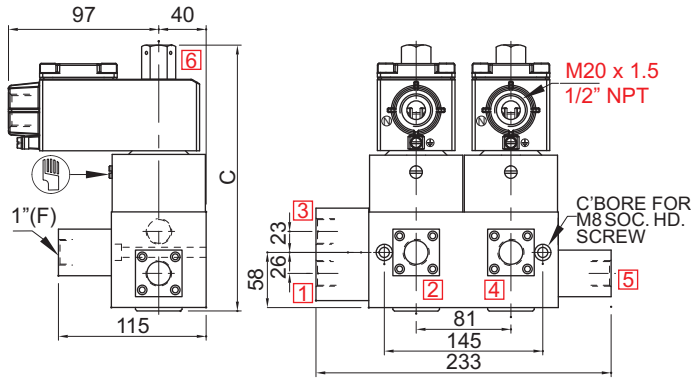
SQUARE PLUG IN SOLENOID TYPE 25

TERMINAL BOX/ Ex d LARGE ENCLOSURE, TYPE 16, 19, 37, 39, 58, 58LT

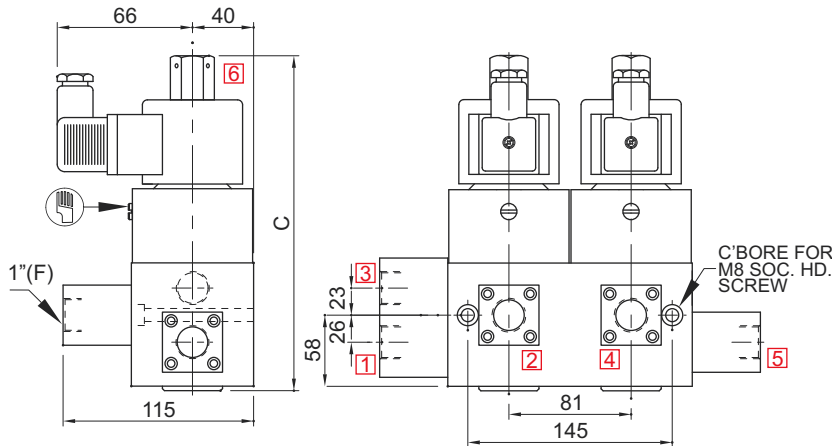
NW	K (PORT SIZE)	A	B	C	D	DT	E	F	G	H	J	L	M	CONST. REF.
<b>VALVE TYPE : 51416, 51420</b>														
10	3/8"	61	122	171	68	97	30.5	95	61	35.5	13.5	13.5	M6	575
16	1/2"	81	165	201	68	97	40.5	145	81	47.5	18	18	M8	576
20	3/4"	81	165	210	68	97	40.5	145	81	57.5	26	23	M8	577

## CONSTRUCTION REFERENCE : 578

### VALVE TYPE : 51416, 51420 ORIFICE : 25 MM



TERMINAL BOX/ Ex d/ LARGE ENCLOSURE, TYPE 16, 19, 37, 39, 58, 58LT



PLUG IN SOLENOID TYPE 25

Specifications are subject to change without notice.