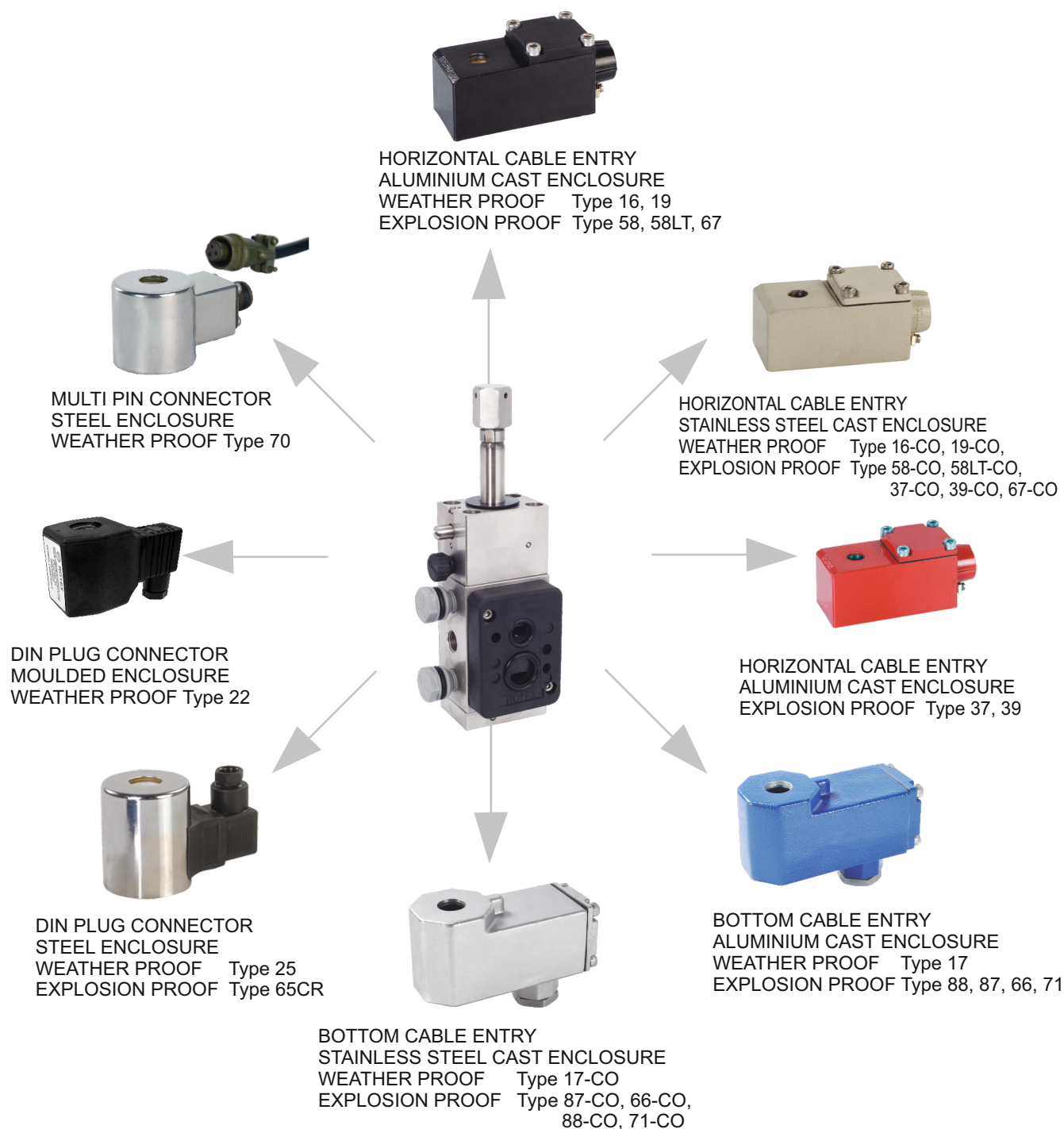


5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

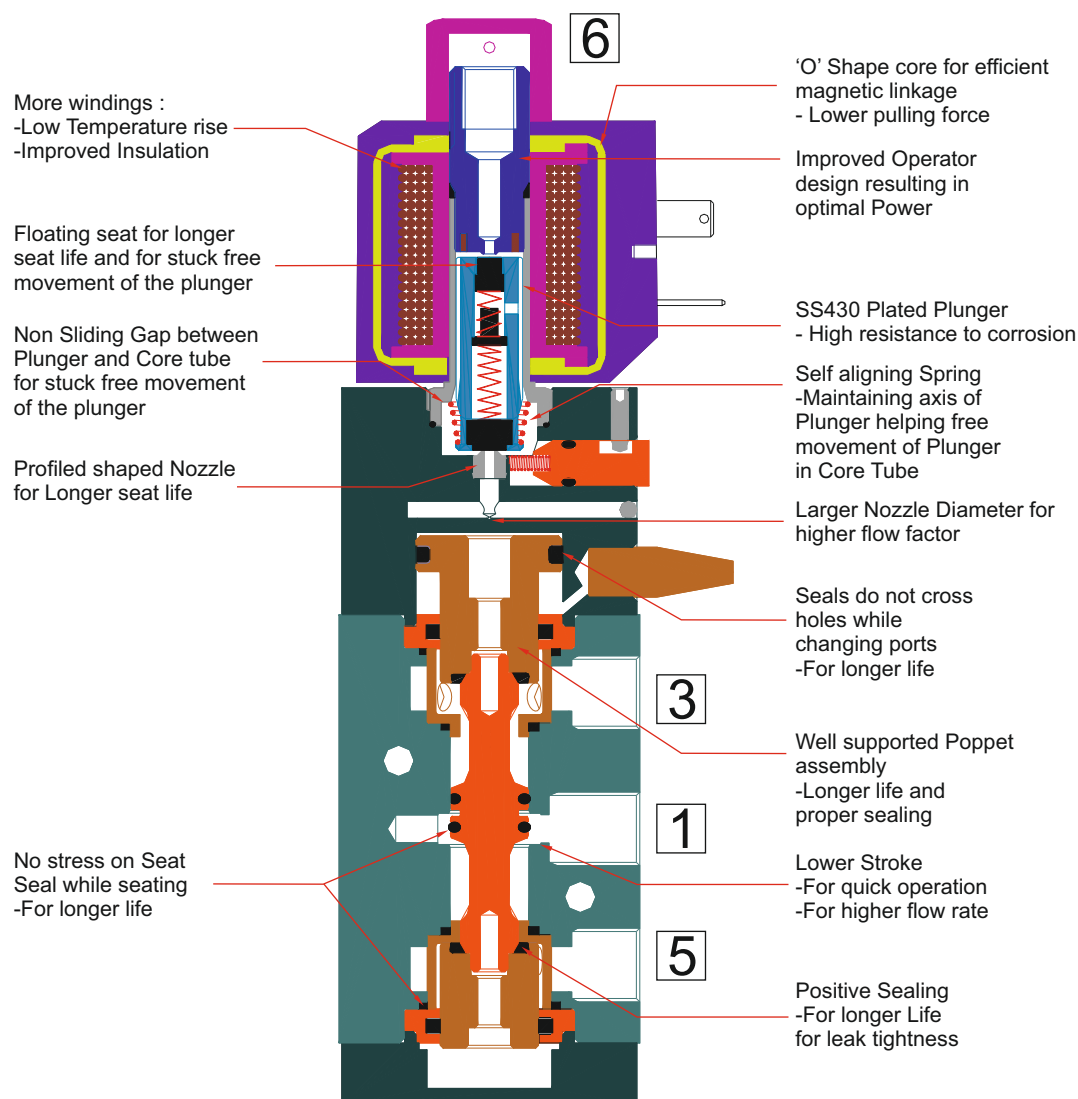


**Interchangeable across
Voltage/ Current range without
affecting performance of the Valve**

5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

FEATURES

- Bubble tight shut OFF
- Ideally suited where speed control by blocking exhaust is desired
- Power fail to reset
- Non return plug provided on the exhaust port
- In 3/2 mode exhaust purged to spring chamber
- Suitable for high speed cycling, speed upto 500 cycles/ min
- Life >20 million cycles



VOLTAGE VARIATION

(For Continuous Duty)

Rated Voltage	Operating Voltage
6	4.8V to 7.2V
12	9.6V to 14.4V
24	19.2V to 28.8V
48	38.4V to 57.6V
110 to 120	88V to 132V
220/ 230/ 240	176V to 264V
256	205V to 280V

WEIGHT IN kg. (lbs) (Appx.)

Valve

Orifice - Port Connection	AI	SS
6-2G/ 2R	0.90 (1.98)	1.90 (4.18)
12-4G/ 4R	1.70 (3.74)	3.90 (8.59)

Solenoid

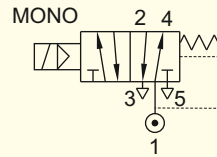
Type	Size	Kg. (lbs)
22	I	0.25 (0.55)
25, 65CR	II	0.45 (0.99)
	III	0.40 (0.88)
	IV	0.50 (1.10)

Type	Size	Enclosure	
		AI	SS
16, 19, 37, 39, 58, 58LT, 67	II, IV	0.85 (1.87)	1.70 (3.74)
	III	0.60 (1.32)	1.50 (3.30)
17, 66, 71, 87, 88	II, IV	1.00 (2.20)	1.65 (3.63)
	III	0.90 (1.98)	1.50 (3.30)

SERIES : 52S

5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

TYPE	PRESSURE
51450	2 - 10 bar (29 - 150 psi)
51450LW	2 - 10 bar (29 - 150 psi)
51450L1	2 - 8 bar (29 - 116 psi)
51450IS	2 - 11 bar (29 - 159 psi)



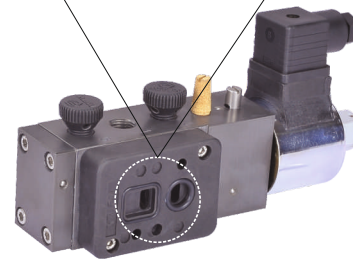
WETTED PARTS

Code	※	B5
Body	Anodized Aluminium	SS316
Internals	Aluminium, Brass and SS316	SS316
Guide	SS304	
Shadow-Ring	Copper	
Plunger, Insert	SS430	
Spring	SS302	
Fasteners	SS304	
Seat, Seals	NBR, Viton	

Match Slot to 3/2 for 3/2



Match Slot to 5/2 for 5/2



PESO



KOSHA



NACE
MR 0175-1

APPLICATION

Operation of double/ single acting Actuator

POWER

Size	Type	Power	Normal		Low		Ex ia	
			6W/ 8W	2W	1W	Type : 66	Type : 65CR, 67, 71	
I/ III	51450							
I/ III	51450LW							
III	51450LW 51450L1							
III	51450							
III	51450IS,							

SPARES

SPARE KIT	CODE
Seal Kit : Oring Set (Only for Intrinsically Safe Valve)	P98
Seal Kit : Oring Set and Plunger Assembly	98
Repair Kit : All Components except Body Cover and Solenoid	99
Repair Kit : All Components except Body and Solenoid (for Intrinsically Safe Valve)	99
Solenoid Kit : Solenoid, Gasket	34

PORT CONNECTION

VALVE TYPE	MODE	INLET	OUTLET	OUTLET	EXHAUST	EXHAUST	PILOT EXHAUST
51450, 51450LW, 51450IS, 51450L1	Single Solenoid	1	2	4	3	5	6

Contact Rotex for

- Any other Temperature Range, Media and Application

5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

SPECIFICATION

VALVE	
Valve Type	5/2, 3/2 Convertible inline poppet, Spring Return, NAMUR double Solenoid Valve
Body Material	Aluminium / Stainless Steel 316
Port Connection	1/4", 1/2"
Orifice	6mm (1/4") / 12mm (1/2")
Seals	NBR / Viton
Manual Override	Stayput / Momentary / Without Manual Override
Flow factor Orifice-kv / Kv / Cv	6mm (1/4") -12 / 0.72 / 0.84 12mm (1/2") -60 / 3.6 / 4.2
Media	Air, Diesel, Hydraulic Oil, Inert Gas, Kerosene, LPG, Lubrication Oil, Petrol (Motor Spirit), Turbine Oil, Water
⑬ Ambient, Fluid Temperature	-13 °F to 167 °F, Optionally -40 °F to 284 °F
Response ON / OFF	≤ 50ms / ≤ 90ms
Pressure	2 - 10 bar (29 - 150 psi), 2 - 8 bar (29 - 116 psi) 2 - 11 bar (29 - 159 psi)

SOLENOID	
Voltage-Current	DC 12V, 24V, 48V, 110V, 220V, 256V
	AC (50Hz / 60Hz) 24V, 110V, 120V, 230V, 240V
	AC / DC (50Hz / 60Hz / DC) 24V, 110V, 120V, 220V, 240V
Power	8W / 6W / 2W / 1W
Protection	Weather Proof IP67 Explosion Proof Ex d, Ex ia, Ex e mb, IIC, T6 / T5 / T4 IP67
Cable Entry	Pg9 / M20 X 1.5 / 1/2" NPT / M25 X 1.5

ORDERING CODE

Solenoid Valve (Valve Code + Solenoid Code)

VALVE TYPE	SIL	SUFFIX	ORIFICE	PORT CONNECTION	BODY INTERNAL	MANUAL OVERRIDE	SEAL	⑭ MEDIA
51450V02	※	※	6	2G	B5	M0	S2G	※
ACCESSORIES VALVE, PORT	+							
A6	SIZE	VOLTAGE, CURRENT	ENCLOSURE	⑦ MTL	SPECIAL	POWER	INSULATION	APPROVAL
	I	24V DC	16	CO	※	※	※	※

SIL	ACCESSORIES SOLENOID
※	B4

Valve Spare Kit

SPARE KIT	VALVE TYPE	SIL	SUFFIX	ORIFICE	PORT CONNECTION	BODY INTERNAL	MANUAL OVERRIDE
99	51450V02	※	※	6	2G	B5	M0
SEAL	-						
S2G	ACCESSORIES VALVE, PORT						
	A6						

Spare Solenoid

SOLENOID KIT	SIZE	VOLTAGE, CURRENT	ENCLOSURE	⑦ MTL	SPECIAL	POWER	INSULATION	APPROVAL
34	I	24V DC	16	CO	※	※	※	※
SIL	-							
※	ACCESSORIES SOLENOID							
	B4							

VALVE TYPE-ORIFICE	
CODE	DESCRIPTION
NORMAL POWER	
51450V02-6	2 - 10 bar (29 - 150 psi), 8 Watt, Port 1/4"
51450-12	2 - 10 bar (29 - 150 psi), 8 Watt, Port 1/2"
LOW POWER	
51450V02LW-6	2 - 10 bar (29 - 150 psi), 2 Watt, Port 1/4", Power LW2
51450LW-12	2 - 10 bar (29 - 150 psi), 2 Watt, Port 1/2", Power LW2
⑪ 51450V02LW-6	2 - 10 bar (29 - 150 psi), 1 Watt, Port 1/4", Size III, Power LB04
⑪ 51450LW-12	2 - 10 bar (29 - 150 psi), 1 Watt, Port 1/2", Size III, Power LB04
51450V02L1	2 - 8 bar (29 - 116 psi), 1 Watt, Port 1/4", Size III, Power LW1
51450L1	2 - 8 bar (29 - 116 psi), 1 Watt, Port 1/2", Size III, Power LW1
INTRINSICALLY SAFE Ex ia 24 V DC	
51450V02-6	2 - 10 bar (29 - 150 psi), Port 1/4", Ex ia Enclosure Type 66, Size III
51450-12	2 - 10 bar (29 - 150 psi), Port 1/2", Ex ia Enclosure Type 66, Size III
51450V02LW-6	2 - 10 bar (29 - 150 psi), Port 1/4", Ex ia Enclosure Type 66 - BP, Size III
51450LW-12	2 - 10 bar (29 - 150 psi), Port 1/2", Ex ia Enclosure Type 66 - BP, Size III
51450V02IS-6	2 - 11 bar (29 - 159 psi), Port 1/4", Enclosure Type 65CR, 67, 71
51450IS-12	2 - 11 bar (29 - 159 psi), Port 1/2", Enclosure Type 65CR, 67, 71

SIL CERTIFIED		SUFFIX	
CODE	DESCRIPTION	CODE	DESCRIPTION
① ※	NO	① ※	NIL
SL	YES	⑧ AM	Ammonia

ORIFICE		PORT CONNECTION	
CODE	DESCRIPTION	CODE	DESCRIPTION
6	6mm (1/4")	2G	1/4" BSP
12	12mm (1/2")	2R	1/4" NPT
		4G	1/2" BSP
		4R	1/2" NPT

BODY MATERIAL		MANUAL OVERRIDE	
CODE	DESCRIPTION	CODE	DESCRIPTION
① ※	ALUMINIUM	M0	NIL
B5	SS316	① ※	Stayput
B5N	SS316 NACE Compliance	M8	Momentary

SERIES : 52S

5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

SEAL		MEDIA
CODE	GRADE, AMBIENT/ FLUID TEMPERATURE	① ✖
① ✖	NBR, -25 °C to 75 °C (-13 °F to 167 °F)	✓
S2G	VITON, -40 °C to 160 °C (-40 °F to 320 °F)	✓

② MEDIA	
CODE	DESCRIPTION
① ✖	Air, Inert Gas

SIZE-VOLTAGE CURRENT		
CODE	SIZE	COIL VOLTAGE
I-12V DC	I	12V DC
I-24V DC	I	24V DC
I-24V 50Hz	I	24V 50Hz / 60Hz
I-110V 50Hz	I	110V 50Hz / 120V 60Hz
I-230V 50Hz	I	230V 50Hz / 240V 60Hz
III-12V DC	III	12V DC
III-24V DC	III	24V DC
III-24V 50Hz	III	24V 50Hz / 60Hz
III-24V AC / DC	III	④ 24V 50Hz / 60Hz / DC
III-48V DC	III	48V DC
III-110V DC	III	110V DC
III-110V 50Hz	III	110V 50Hz / 120V 60Hz
III-110V AC / DC	III	④ 110V 50Hz / 60Hz / DC 120V 50Hz / 60Hz / DC
III-220V DC	III	220V DC
III-230V 50Hz	III	230V 50Hz / 240V 60Hz
III-230V AC / DC	III	④ 220V 50Hz / 60Hz / DC 240V 50Hz / 60Hz / DC
III-256V DC	III	256V DC

ENCLOSURE TYPE	
CODE	DESCRIPTION
WEATHER PROOF	
⑤ 22	DIN Plug Solenoid, IP67, Cable Entry Pg9, as per DIN43650B, Size I
⑤ 25	DIN Plug Solenoid, IP67, Cable Entry Pg9, as per DIN43650A, Size III, IV
16	Integrated Terminal box, IP 67, ½" NPT, -40°C to 100°C (-40°F to 212°F)
19	Integrated Terminal box, IP 67, M20X1.5, -40°C to 100°C (-40°F to 212°F)
17	Integrated Terminal Box, IP67, Bottom Cable Entry, M25X1.5, Size III, IV
17-MS	Integrated Terminal Box, IP67, Bottom Cable Entry, M20X1.5, Size III, IV
17-NS	Integrated Terminal Box, IP67, Bottom Cable Entry, ½" NPT, Size III, IV
17-A	Integrated Terminal Box, IP68, Bottom Cable Entry, M25X1.5, Size III, IV
17-MS-A	Integrated Terminal Box, IP68, Bottom Cable Entry, M20X1.5, Size III, IV
17-NS-A	Integrated Terminal Box, IP68, Bottom Cable Entry, ½" NPT, Size III, IV
EXPLOSION PROOF Ex d (For Gas and Dust)	
⑬ 37	Ex d IIC IP66, -40°C TO 60°C (-40°F to 140°F), ½" NPT
⑬ 39	Ex d IIC IP66, -40°C TO 60°C (-40°F to 140°F), M20 X 1.5
87	Ex d IIC IP67, -60°C TO 100°C (-76°F to 212°F), M25 X 1.5, Size III, IV
87-MS	Ex d IIC IP67, -60°C TO 100°C (-76°F to 212°F), M20 X 1.5, Size III, IV
87-NS	Ex d IIC IP67, -60°C TO 100°C (-76°F to 212°F), ½" NPT, Size III, IV
87-A	Ex d IIC IP68, -60°C TO 100°C (-76°F to 212°F), M25 X 1.5, Size III, IV
87-MS-A	Ex d IIC IP68, -60°C TO 100°C (-76°F to 212°F), M20 X 1.5, Size III, IV
87-NS-A	Ex d IIC IP68, -60°C TO 100°C (-76°F to 212°F), ½" NPT, Size III, IV
88	Explosion Proof, UL Listed, -60°C to 100°C (-76°F to 212°F), M25 X 1.5, Size II, III, IV
88-MS	Explosion Proof, UL Listed, -60°C to 100°C (-76°F to 212°F), M20 X 1.5, Size II, III, IV
88-NS	Explosion Proof, UL Listed, -60°C to 100°C (-76°F to 212°F), 1/2" NPT, Size II, III, IV
EXPLOSION PROOF Ex e mb (For Gas and Dust)	
58	Ex e mb IIC, IP67, -40°C TO 70°C (-40°F to 158°F), M25 X 1.5
58-MS	Ex e mb IIC, IP67, -40°C TO 70°C (-40°F to 158°F), M20 X 1.5
58-NS	Ex e mb IIC, IP67, -40°C TO 70°C (-40°F to 158°F), ½" NPT
58LT	Ex e mb IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M25 X 1.5
58LT-MS	Ex e mb IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M20 X 1.5
58LT-NS	Ex e mb IIC, IP67, -60°C TO 70°C (-76°F to 158°F), ½" NPT
EXPLOSION PROOF Ex ia (For Gas and Dust)	
③ 65CR	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), Pg9, Size III, DIN Plug In Enclosure
66	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M25 X 1.5, Size III, Booster Circuit
66-MS	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M20 X 1.5, Size III, Booster Circuit
66-NS	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), ½" NPT, Size III, Booster circuit
66-BP	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M25 X 1.5, Size III, Booster Circuit
66-MS-BP	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M20 X 1.5, Size III, Booster Circuit
66-NS-BP	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), ½" NPT, Size III, Booster circuit
67	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M25 X 1.5, Size III
67-MS	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M20 X 1.5, Size III
67-NS	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), ½" NPT, Size III
71	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M25 X 1.5, Size III
71-MS	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), M20 X 1.5, Size III
71-NS	Ex ia IIC, IP67, -60°C TO 70°C (-76°F to 158°F), ½" NPT, Size III

⑦ ENCLOSURE MATERIAL	
CODE	DESCRIPTION
① ✖	Aluminium Cast Epoxy Powder Coated
CO	CF8M (SS316 Cast)
CO-3M	CF3M (SS316L Cast)

SPECIAL	
CODE	DESCRIPTION
① ✖	NIL
⑦ FR	Full Rectifier with Surge Suppressor Size II, III, IV
⑩ ③① LD	LED, Size II, III, IV
⑫ ②⑥ SS	Surge Suppressor Size II, III, IV
③① RC	Half Rectifier with Surge Suppressor Size III

INSULATION		SIL	
CODE	DESCRIPTION	CODE	DESCRIPTION
① ✖	CLASS F	① ✖	NO
H	CLASS H	SL	YES

POWER																
			12V DC	24V DC	24V 50Hz	24V AC/ DC	48V DC	110V DC	110V 50Hz	110V AC/ DC		230V 50Hz	220V DC	230V AC/ DC		256V DC
CODE	SIZE	POWER WATT	12V DC	24V DC	24V 50Hz/ 60 Hz	24V 50Hz/ ④ 60 Hz/ DC	48V DC	110V DC	110V 50Hz/ 120V 60Hz	110V 50Hz/ ④ 60Hz/ DC	120V 50Hz/ ④ 60Hz/ DC	230V 50Hz/ 240V 60Hz	220V DC	220V 50Hz/ ④ 60Hz/ DC	240V 50Hz/ ④ 60Hz/ DC	256V DC
LW2	I	2.0		✓												
①✖	I	6.0			✓				✓			✓				
①✖	I	8.0	✓	✓												
LW01	III	1		✓												
LW2	III	2.0	✓	✓				✓		✓	✓					
①✖	III	6.0			✓				✓			✓				
①✖	III	8.0	✓	✓		✓	✓	✓		✓			✓	✓		
		9.0									✓				✓	✓
⑪ LB04	III	0.4		✓												

5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

APPROVAL		9 ENCLOSURE TYPE													
CODE	DESCRIPTION	17	37	39	58	58LT	62	65CR	66	67	71	87	17A	87A	88
① 15 ✖	CCOE/ PESO + BIS, Insulation Class H		✓	✓			✓	✓	✓	✓	✓	✓		✓	
01	CE - ATEX, Insulation Class H		✓	✓	✓	✓									
01	IEC Ex + ATEX, Insulation Class H						✓		✓	✓	✓	✓		✓	
01B	CCOE / PESO + CE - ATEX		✓	✓	✓	✓									
01B	CCOE / PESO + IEC Ex + ATEX						✓	✓	✓	✓	✓	✓		✓	
02	UL Recognised, for USA and Canada, Type 3, 3S, 4, 4X, 6, 6P UL file Number E 342217	✓											✓		
03	INMETRO + ATEX, Insulation Class H		✓	✓			✓		✓	✓	✓	✓		✓	
03C	IEC Ex + ATEX + IN METRO + CuTR-EAC											✓		✓	
03U	IEC Ex + ATEX + IN METRO + UL (Type 3, 3S, 4, 4X, 6, 6P)	✓										✓		✓	
04	CuTR- EAC + ATEX , Insulation Class H		✓	✓			✓		✓	✓	✓	✓		✓	
04U	IEC Ex + ATEX + CuTR + UL (Type 3, 3S, 4, 4X, 6, 6P)	✓										✓	✓	✓	
② 07	KOSHA + ATEX, Insulation Class H											✓		✓	
08	Ukraine, Insulation Class H						✓		✓	✓	✓	✓		✓	
09	UL Listed Ex for USA & Canada Class I, DIV 1, Class II, DIV 1, Class III DIV 1														✓
12	ITRI Certification (TS Certification Taiwan)						✓		✓	✓	✓				
②3 CE	CE (Weatherproof Solenoid)	✓											✓		
②0 EAC	EAC MARK	✓											✓		

Note :

- ① Do not Specify when opted for
- ② Approval Other than BIS, CCOE / PESO, DGMS
- ③ BIS, CCOE / PESO, DGMS Approved coil
- ④ Opt FR from special
- ⑤ Current DC, 50Hz, 60Hz
- ⑦ Do not Opt for Enclosure Type 01, 06, 22, 25
- ⑧ Select Body Material SS316 (B5), Solenoid DC or AC / DC Current
- ⑨ All variation of 17, 37, 39, 58, 58LT, 62, 65CR, 66, 67, 71, 87 included
- ⑩ Media should be Oil free Air / Inert Gas / Water
- ⑪ Do not opt for 01, 06, 22, 25. In rush 2W for 100 msec, Holding 0.4W
- ⑫ Current DC
- ⑬ Ambient Temperature restricted for Enclosure Type 17, 37, 39, 58, 58LT, 62, 65CR, 66, 67, 71, 87 to Solenoid Ambient Temperature
- ⑭ Select Nil or one Accessories from A1 to A6 for Valve and B1 to B8 for Solenoid
- ⑮ IP67 Certified by BIS, CCOE / PESO, DGMS
- ⑰ Select Solenoid XXXV DC or III-XXXV AC / DC
- ⑳ Opt for Enclosure Type 01, 06
- ㉑ KOSHA Certificate only for Enclosure size II 720W
- ㉒ Orifice 6, 12, 25
- ㉓ Can not be opted for Enclosure Type 01, 06, 16, 19, 22, 25
- ㉔ Enclosure Type 17, 17NS, 87, 87MS, 87NS
- ㉕ For Body material B17 (Brass Forged) and B12 (Cast Ss316), add suffix V01 to Valve Type
- ㉖ Do not Opt for Enclosure Type 01, 06, 22
- ㉗ Media shall not be part of Ordering code but It shall be printed separately on Valve
- ㉘ For Solenoid type 25 with AC current supply, Use 50Hz with Special RC Option
- ㉙ For Intrinsically Safe Solenoid, LD (LED) can be opted with CCOE/PESO certification only
- ㉚ Seal Kit Code P98 & Repair Kit Code 99 for Intrinsically Safe Valve

ENTITY PARAMETER		MINIMUM OPERATING PARAMETER			RESPONSE ON TIME FOR SOLENOID TYPE 66-BP								
Entity Parameter		Type	62	62..LD..	Voltage(V)	6.5	7	8	9.5	10.5	11.5	12.5	14
Ui	32V DC	Minimum Voltage (V)	12.5	14	Current(mA)	9	10.15	12.5	15	17.5	20	22	24.5
Ii	230mA	Minimum Current (mA)	25.5	28.5	Response Time(ms) ≤	2500	2350	1600	1200	1100	1000	600	250
Pi	2.3W	Minimum Power (W)	0.3	0.4									
Ci	0	LED	NO	YES									
Li	0	Pressure (bar)	10	10									

MINIMUM OPERATING PARAMETER

Type	66	66..LD..	66-BP	66-BP-LD	65CR	67	67..LD..	71	71..LD..
Minimum Voltage (V)	10	10	6.5	7	14	14	15	14	14
Minimum Current (mA)	20	21	9	10.15	25	25	28	25	28
Minimum Power (W)	0.20	0.21	0.06	0.07	0.35	0.35	0.42	0.35	0.42
LED	No	Yes	No	Yes	No	No	Yes	No	Yes
Pressure (bar)	As per Solenoid Valve rating		Maximum 11.0					As per Solenoid Valve rating	

RESPONSE ON TIME FOR SOLENOID TYPE 62, 66, 62..LD., 66..LD..

Voltage (V)	10	11	12	14	18	22	24	26	30	32	Current (mA)	18.5	20	25	30
Current (mA)	20	22	24	28.5	37	45.5	49.7	54	63	67	Open Ckt Voltage (V)	19.5	19.5	19.5	19.5
Response Time (ms) ≤	4800	3800	2500	1600	850	650	450	400	250	250	Time (ms) ≤	5000	4000	2500	2000

5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

Explosion Proof

ENCLOSURE TYPE 37/ 39

SIZE	Power	BIS & PESO, DGMS	ATEX / INMETRO	EAC - CuTR (Russia)
I II IV	≤ 5W ≤ 8W ≤ 11W	Ex d IIC T6/ T5 Gb IP67 -20 °C ≤ Ta ≤ 65 °C FOR T6 -20 °C ≤ Ta ≤ 70 °C FOR T5	Ex db IIC T6/ T5 Gb Ex tb IIIC T80°C/ T95°C Db, IP66/ IP67 -40°C ≤ Ta ≤ 65°C FOR T6 -40°C ≤ Ta ≤ 70°C FOR T5	1 Ex db IIC T6/ T5/ T4 Gb Ex tb IIIC T80°C/ 95°C/ 130°C Db, IP66 -40°C ≤ Ta ≤ 35°C FOR T6 -40°C ≤ Ta ≤ 50°C FOR T5 -40°C ≤ Ta ≤ 60°C FOR T4
I II III	≤ 8W ≤ 13W ≤ 8W	Ex d IIC T6/ T5 Gb IP67 -20°C ≤ Ta ≤ 60°C FOR T6 -20°C ≤ Ta ≤ 70°C FOR T5	Ex db IIC T6/ T5 Gb Ex tb IIIC T80°C/ T95°C Db, IP66/ IP67 -40°C ≤ Ta ≤ 60°C FOR T6 -40°C ≤ Ta ≤ 70°C FOR T5	
III	≤ 15W	Ex d IIC T6/ T5/ T4 Gb IP67 -20°C ≤ Ta ≤ 50°C FOR T6 -20°C ≤ Ta ≤ 65°C FOR T5 -20°C ≤ Ta ≤ 70°C FOR T4	Ex db IIC T6/ T5/ T4 Gb Ex tb IIIC T80°C/ T95°C/ T130°C Db, IP66/ IP67 -40°C ≤ Ta ≤ 50°C FOR T6 -40°C ≤ Ta ≤ 65°C FOR T5 -40°C ≤ Ta ≤ 70°C FOR T4	
III IV	≤ 5W ≤ 5W	Ex d IIC T6 Gb IP67 -20 °C ≤ Ta ≤ 70 °C FOR T6	Ex db IIC T6 Gb Ex tb IIIC T80°C Db, IP66/ IP67 -40°C ≤ Ta ≤ 70°C FOR T6	
II	≤ 20W	Ex d IIC T6/ T5 Gb IP67 -20°C ≤ Ta ≤ 55°C FOR T6 -20°C ≤ Ta ≤ 70°C FOR T5	Ex db IIC T6/ T5 Gb Ex tb IIIC T80°C/ T95°C Db, IP66/ IP67 -40 °C ≤ Ta ≤ 55 °C FOR T6 -40 °C ≤ Ta ≤ 70 °C FOR T5	
II	≤ 30W	Ex d IIC T6/ T5/ T4 Gb IP67 -20°C ≤ Ta ≤ 40°C FOR T6 -20°C ≤ Ta ≤ 55°C FOR T5 -20°C ≤ Ta ≤ 70°C FOR T4	Ex db IIC T6/ T5/ T4 Gb Ex tb IIIC T80°C/ T95°C/ T130°C Db, IP66/ IP67 -40 °C ≤ Ta ≤ 40 °C FOR T6 -40 °C ≤ Ta ≤ 55 °C FOR T5 -40 °C ≤ Ta ≤ 70 °C FOR T4	

ENCLOSURE TYPE 87

SIZE	Power	ATEX, IEC Ex, BIS & PESO, DGMS	INMETRO	EAC - CuTR (Russia) / UKRANE	KOSHA
III II IV	≤ 5W ≤ 8W ≤ 11W	Ex d IIC T6/T5/T4 Gb IP67 Ex t IIIC T85°C/T100°C/T135°C Db IP67 -60°C ≤ Ta ≤ +65°C for T6 -60°C ≤ Ta ≤ +80°C for T5 -60°C ≤ Ta ≤ +100°C for T4	Ex d IIC T6/T5/T4 Gb Ex t IIIC T85°C/T100°C/T135°C Db IP67 -60°C ≤ Ta ≤ +65°C for T6 -60°C ≤ Ta ≤ +80°C for T5 -60°C ≤ Ta ≤ +100°C for T4	1 Ex d IIC T6/T5/T4 Gb IP67 Ex tb IIIC T80°C/T95°C/T130°C Db ИЛИ -60°C ≤ Ta ≤ +65°C for T6 -60°C ≤ Ta ≤ +80°C for T5 -60°C ≤ Ta ≤ +100°C for T4	형식 또는 모델명 : 87, BCE 규격 또는 등급 : Ex d IIC T3-T6 제조자명 : Rotex Automation Limited 안전인증 번호 : IS-AV4B0-0000
III II	≤ 8W ≤ 13W ≤ 8W	Ex d IIC T6/T5/T4 Gb IP67 Ex t IIIC T85°C/T100°C/T135°C Db IP67 -60°C ≤ Ta ≤ +60°C for T6 -60°C ≤ Ta ≤ +75°C for T5 -60°C ≤ Ta ≤ +100°C for T4	Ex d IIC T6/T5/T4 Gb Ex t IIIC T85°C/T100°C/T135°C Db IP67 -60°C ≤ Ta ≤ +60°C for T6 -60°C ≤ Ta ≤ +75°C for T5 -60°C ≤ Ta ≤ +100°C for T4	1 Ex d IIC T6/T5/T4 Gb IP67 Ex tb IIIC T80°C/T95°C/T130°C Db ИЛИ -60°C ≤ Ta ≤ +60°C for T6 -60°C ≤ Ta ≤ +75°C for T5 -60°C ≤ Ta ≤ +100°C for T4	
III	≤ 15W	Ex d IIC T6/T5/T4 Gb IP67 Ex t IIIC T85°C/T100°C/T135°C Db IP67 -60°C ≤ Ta ≤ +50°C for T6 -60°C ≤ Ta ≤ +65°C for T5 -60°C ≤ Ta ≤ +100°C for T4	Ex d IIC T6/T5/T4 Gb Ex t IIIC T85°C/T100°C/T135°C Db IP67 -60°C ≤ Ta ≤ +50°C for T6 -60°C ≤ Ta ≤ +65°C for T5 -60°C ≤ Ta ≤ +100°C for T4	1 Ex d IIC T6/T5/T4 Gb IP67 Ex tb IIIC T80°C/T95°C/T130°C Db ИЛИ -60°C ≤ Ta ≤ +50°C for T6 -60°C ≤ Ta ≤ +65°C for T5 -60°C ≤ Ta ≤ +100°C for T4	
IV	≤ 5W ≤ 5W	Ex d IIC T6/T5/T4 Gb IP67 Ex t IIIC T85°C/T100°C/T135°C Db IP67 -60°C ≤ Ta ≤ +70°C for T6 -60°C ≤ Ta ≤ +85°C for T5 -60°C ≤ Ta ≤ +100°C for T4	Ex d IIC T6/T5/T4 Gb Ex t IIIC T85°C/T100°C/T135°C Db IP67 -60°C ≤ Ta ≤ +70°C for T6 -60°C ≤ Ta ≤ +85°C for T5 -60°C ≤ Ta ≤ +100°C for T4	1 Ex d IIC T6/T5/T4 Gb IP67 Ex tb IIIC T80°C/T95°C/T130°C Db ИЛИ -60°C ≤ Ta ≤ +70°C for T6 -60°C ≤ Ta ≤ +85°C for T5 -60°C ≤ Ta ≤ +100°C for T4	
II	≤ 20W	Ex d IIC T5/T4/T3 Gb IP67 Ex IIIC T100°C/T135°C/155°C Db IP67 -60°C ≤ Ta ≤ +45°C for T5 -60°C ≤ Ta ≤ +80°C for T4 -60°C ≤ Ta ≤ +100°C for T3	Ex d IIC T5/T4/T3 Gb Ex IIIC T100°C/T135°C/155°C Db IP67 -60°C ≤ Ta ≤ +45°C for T5 -60°C ≤ Ta ≤ +80°C for T4 -60°C ≤ Ta ≤ +100°C for T3	1 Ex d IIC T5/T4/T3 Gb IP67 Ex tb IIIC T95°C/T130°C/T155°C Db ИЛИ -60°C ≤ Ta ≤ +45°C for T5 -60°C ≤ Ta ≤ +80°C for T4 -60°C ≤ Ta ≤ +100°C for T3	
II	≤ 30W	Ex d IIC T4/T3 Gb IP67 Ex IIIC T135°C/T150°C Db IP67 -60°C ≤ Ta ≤ +60°C for T4 -60°C ≤ Ta ≤ +70°C for T3	Ex d IIC T4/T3 Gb Ex IIIC T135°C/T155°C Db IP67 -60°C ≤ Ta ≤ +60°C for T4 -60°C ≤ Ta ≤ +70°C for T3	1 Ex d IIC T4/T3 Gb IP67 Ex tb IIIC T130°C/T155°C Db ИЛИ -60°C ≤ Ta ≤ +60°C for T4 -60°C ≤ Ta ≤ +70°C for T3	

5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

Explosion Proof

ENCLOSURE TYPE 58

SIZE	Power	CE-ATEX, Insulation H
II IV	≤ 5W ≤ 8W ≤ 11W	Ex II 2GD Ex e mb IIC T6/T5 Gb IP67 Ex tb IIIC T6/ T5 Db IP67 -40°C ≤ Ta ≤ 65°C for T6 -40°C ≤ Ta ≤ 70°C for T5
II III	≤ 8W ≤ 13W ≤ 8W	Ex II 2GD Ex e mb IIC T6/T5 Gb IP67 Ex tb IIIC T6/ T5 Db IP67 -40°C ≤ Ta ≤ 60°C for T6 -40°C ≤ Ta ≤ 70°C for T5
III	≤ 15W	Ex II 2GD Ex e mb IIC T6/T5/T4 Gb IP67 Ex tb IIIC T6/ T5/ T4 Db IP67 -40°C ≤ Ta ≤ 50°C for T6 -40°C ≤ Ta ≤ 65°C for T5 -40°C ≤ Ta ≤ 70°C for T4
III IV	≤ 5W ≤ 5W	Ex II 2GD Ex e mb IIC T6 Gb IP67 Ex tb IIIC T6 Db IP67 -40°C ≤ Ta ≤ 70°C for T6
II	≤ 20W	Ex II 2GD Ex e mb IIC T6/T5 Gb IP67 Ex tb IIIC T6/ T5 Db IP67 -40°C ≤ Ta ≤ 50°C for T6 -40°C ≤ Ta ≤ 70°C for T5
II	≤ 30W	Ex II 2GD Ex e mb IIC T6/T5/T4 Gb IP67 Ex tb IIIC T6/ T5/ T4 Db IP67 -40°C ≤ Ta ≤ 40°C for T6 -40°C ≤ Ta ≤ 55°C for T5 -40°C ≤ Ta ≤ 70°C for T4

ENCLOSURE TYPE 58LT

SIZE	Power	CE-ATEX, Insulation H
II IV	≤ 5W ≤ 8W ≤ 11W	Ex II 2GD Ex e mb IIC T6/T5 Gb IP67 Ex tb IIIC T6/ T5 Db IP67 -60°C ≤ Ta ≤ 65°C for T6 -60°C ≤ Ta ≤ 70°C for T5
II III	≤ 8W ≤ 13W ≤ 8W	Ex II 2GD Ex e mb IIC T6/T5 Gb IP67 Ex tb IIIC T6/ T5 Db IP67 -60°C ≤ Ta ≤ 60°C for T6 -60°C ≤ Ta ≤ 70°C for T5
III	≤ 15W	Ex II 2GD Ex e mb IIC T6/T5/T4 Gb IP67 Ex tb IIIC T6/ T5/ T4 Db IP67 -60°C ≤ Ta ≤ 50°C for T6 -60°C ≤ Ta ≤ 65°C for T5 -60°C ≤ Ta ≤ 70°C for T4
III IV	≤ 5W ≤ 5W	Ex II 2GD Ex e mb IIC T6 Gb IP67 Ex tb IIIC T6 Db IP67 -60°C ≤ Ta ≤ 70°C for T6
II	≤ 20W	Ex II 2GD Ex e mb IIC T6/T5 Gb IP67 Ex tb IIIC T6/ T5 Db IP67 -60°C ≤ Ta ≤ 55°C for T6 -60°C ≤ Ta ≤ 70°C for T5
II	≤ 30W	Ex II 2GD Ex e mb IIC T6/T5/T4 Gb IP67 Ex tb IIIC T6/ T5/ T4 Db IP67 -60°C ≤ Ta ≤ 40°C for T6 -60°C ≤ Ta ≤ 55°C for T5 -60°C ≤ Ta ≤ 70°C for T4

ENCLOSURE TYPE 88

SIZE	Power	US & Canada (UL Recognized)
III	≤ 6W	CLASS I, DIV I, GROUP B, C, D CLASS II, DIV I, GROUP E, F, G CLASS III, DIV I -60 °C ≤ Ta ≤ 55 °C FOR T6 -60 °C ≤ Ta ≤ 70 °C FOR T5 -60 °C ≤ Ta ≤ 100 °C FOR T4 TYPE 3, 3R, 3S, 4, 4X, 6, 6P
IV	≤ 5W	CLASS I, DIV I, GROUP B, C, D CLASS II, DIV I, GROUP E, F, G CLASS III, DIV I -60 °C ≤ Ta ≤ +65 °C FOR T6 -60 °C ≤ Ta ≤ +80 °C FOR T5 -60 °C ≤ Ta ≤ +100 °C FOR T4A TYPE 3, 3R, 3S, 4, 4X, 6, 6P
II III IV	≤ 9W ≤ 9W ≤ 13W	CLASS I, DIV I, GROUP B, C, D CLASS II, DIV I, GROUP E, F, G CLASS III, DIV I -60 °C ≤ Ta ≤ +60 °C FOR T6 -60 °C ≤ Ta ≤ +75 °C FOR T5 -60 °C ≤ Ta ≤ +95 °C FOR T4A -60 °C ≤ Ta ≤ +100 °C FOR T4 TYPE 3, 3R, 3S, 4, 4X, 6, 6P
II III	≤ 15W ≤ 17W	CLASS I, DIV I, GROUP B, C, D CLASS II, DIV I, GROUP E, F, G CLASS III, DIV I -60 °C ≤ Ta ≤ +50 °C FOR T6 -60 °C ≤ Ta ≤ +65 °C FOR T5 -60 °C ≤ Ta ≤ +85 °C FOR T4A -60 °C ≤ Ta ≤ +100 °C FOR T4 TYPE 3, 3R, 3S, 4, 4X, 6, 6P
II	≤ 22W	CLASS I, DIV I, GROUP B, C, D CLASS II, DIV I, GROUP E, F, G CLASS III, DIV I -60 °C ≤ Ta ≤ +45 °C FOR T6 -60 °C ≤ Ta ≤ +60 °C FOR T5 -60 °C ≤ Ta ≤ +70 °C FOR T4A TYPE 3, 3R, 3S, 4, 4X, 6, 6P
II	≤ 30W	CLASS I, DIV I, GROUP B, C, D CLASS II, DIV I, GROUP E, F, G CLASS III, DIV I -60 °C ≤ Ta ≤ +30 °C FOR T6 -60 °C ≤ Ta ≤ +45 °C FOR T5 -60 °C ≤ Ta ≤ +65 °C FOR T4A -60 °C ≤ Ta ≤ +70 °C FOR T4 TYPE 3, 3R, 3S, 4, 4X, 6, 6P

ENCLOSURE TYPE 62, 66, 67 & 71

Enclosure	ATEX/ IECEx (Eurpoe)/ INMETRO/ CEPEL (Brazil)	EAC - CuTR (Russia)
Al Cast	Ex ia IIC T5 Ga (-60°C ≤ Ta ≤ +75°C) Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +60°C) Ex ia IIIC T200 125°C IP67 Da (60°C ≤ Ta ≤ +75°C)	0 Ex ia IIC T5 Ga IP67 (-60°C ≤ Ta ≤ +75°C) 0 Ex ia IIC T6 Ga IP67 (-60°C ≤ Ta ≤ +60°C) 0 Ex ia IIIC T200 125°C IP67 Da (-60°C ≤ Ta ≤ +75°C)
SS Cast	Ex ia IIC T5 Ga (-60°C ≤ Ta ≤ +75°C) Ex ia IIC T6 Ga (-60°C ≤ Ta ≤ +60°C) Ex ia IIIC T200 125°C IP67 Da (60°C ≤ Ta ≤ +75°C) Ex ia I Ma (-60°C ≤ Ta ≤ 75°C)	0 Ex ia IIC T5 Ga IP67 (-60°C ≤ Ta ≤ +75°C) 0 Ex ia IIC T6 Ga IP67 (-60°C ≤ Ta ≤ +60°C) 0 Ex ia IIIC T200 125°C IP67 Da (-60°C ≤ Ta ≤ +75°C) PO Ex ia I Ma (-60°C ≤ Ta ≤ +75°C) (ТОЛЬКО сталь) ИЛИ
Al Cast	Ukraine 0 Ex ia IIC T5 X -60°C ≤ Ta ≤ +75°C 0 Ex ia IIC T6 X -60°C ≤ Ta ≤ +60°C	
SS Cast	BIS & PESO, DGMS PO Иа X -60°C ≤ Ta ≤ +75°C (ДЛЯ варіанта у сталюму корпусі) 0 Ex ia IIC T5 X -60°C ≤ Ta ≤ +75°C 0 Ex ia IIC T6 X -60°C ≤ Ta ≤ +60°C	

ENCLOSURE TYPE 65CR

BIS & PESO, DGMS
Ex ia IIC T5, IP67 (-40°C ≤ Ta ≤ 75°C) Ex ia IIC T6, IP67 (-40°C ≤ Ta ≤ 60°C)

MARKING Weather Proof

ENCLOSURE TYPE 17

US & Canada (UL Recognised)
TYPE 3, 3R, 3S, 4, 4X, 6 & 6P -60°C to +100°C POWER ≤ 20W -60°C to +60°C 20W < POWER ≤ 30W

5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

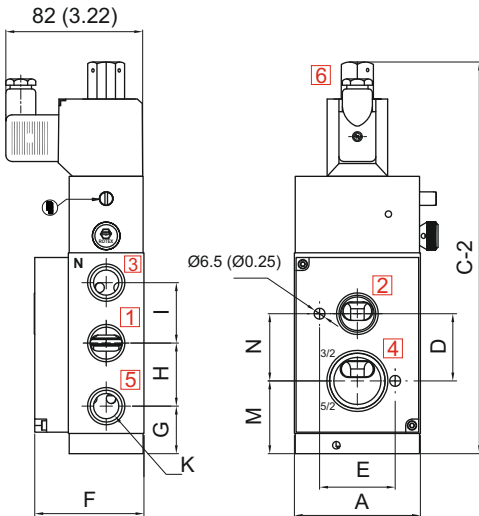
14 ACCESSORIES			
	CODE	DESCRIPTION	
	① ✖	NIL	VALVE
	A1	NRV Metallic Dust cap SS316, ideally suited for Protecting Valve internals from external Environment (Ambient Temperature -60°C to 150°C (-76°F to 302°F), Water, Snow, Bugs, etc.	
	A3	Silencer Sintered Bronze	
	A4	Silencer Sintered SS	
	A5	Dust Cap (Ambient Temperature -20°C to 80°C (-4°F to 176°F)	
	A6	NRV Dust cap Nylon, ideally suited for preventing external Environmental Media / Water / Liquid entering in the valve. Supplied only for 1/4" BSP / NPT (Ambient Temperature -20°C to 80°C (-4°F to 176°F)	
	① ✖	NIL	SOLENOID
	B1	Weather Proof Cable Gland M20X1.5(M) Brass	
	B5	ATEX Approved Cable Gland (Plastic) M20X1.5(M) (Ambient Temperature -20°C to 80°C (-4°F to 176°F)	
	B6	ATEX Approved Cable Gland (BRASS) M20X1.5(M) (Ambient Temperature -20°C to 80°C (-4°F to 176°F)	
	B7	ATEX Approved Cable Gland (SS316) M20X1.5(M) (Ambient Temperature -20°C to 80°C (-4°F to 176°F)	
	B8	Weather Proof Cable gland M20X1.5(M) (Plastic)	
	B3	Explosion Proof Double Compression Cable Gland (BRASS) 1/2" NPT(M) (Ambient Temperature -20°C to 80°C (-4°F to 176°F), CCOE / PESO Certified	
	B4	Explosion Proof Double Compression Cable Gland (SS316) 1/2" NPT(M) (Ambient Temperature -20°C to 80°C (-4°F to 176°F), CCOE / PESO Certified	

5/2, 3/2 CONVERTIBLE INLINE POPPET, SPRING RETURN, NAMUR SINGLE SOLENOID VALVE

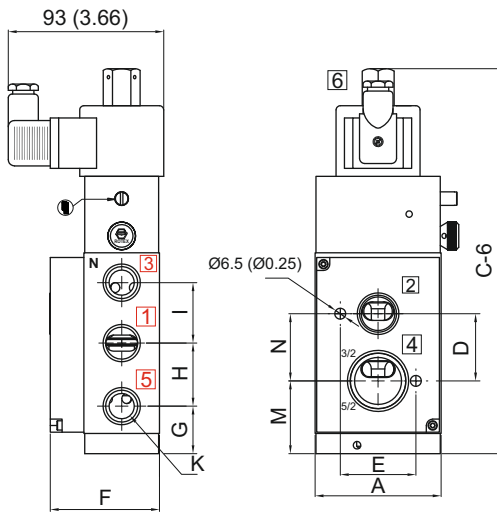
DIMENSIONS



All dimensions are in mm (inch)



Valve Type	51450V02, 51450, 51450LW, 51450V02LW,
Enclosure Type	22
Enclosure Size	I
Port Connection	¼", ½"
Body Material	Aluminium, SS



Valve Type	51450V02, 51450, 51450V02LW, 51450V02IS, 51450LW, 51450V02L1, 51450L1, 51450IS
Enclosure Type	25, 65CR
Enclosure Size	III
Port Connection	¼", ½"
Body Material	Aluminium, SS

Valve Type : 51450V02, 51450, 51450V02LW, 51450V02IS, 51450LW, 51450V02L4, 51450L4, 51450IS											
NW	K	A	C	D	E	F	G	H	I	M	N
6 (¼")	¼"	53 (2.09)	198 (7.79)	24 (0.94)	32 (1.26)	48 (1.89)	25 (0.98)	24 (0.94)	24 (0.94)	38 (1.50)	22.5 (0.88)
12 (½")	½"	75 (2.95)	235 (9.25)	40 (1.57)	45 (1.77)	65 (2.56)	28 (1.10)	37.5 (1.48)	36 (1.42)	43 (1.69)	40 (1.57)

Technical drawing of the 127 (5) cable gland, showing front and side views with dimensions and callouts.

Dimensions:

- Overall width: 127 (5)
- Overall height: C
- Front view dimensions: F (width), I (height), H (height), G (height), K (height), N (height), M (height), E (width), A (width), D (height).

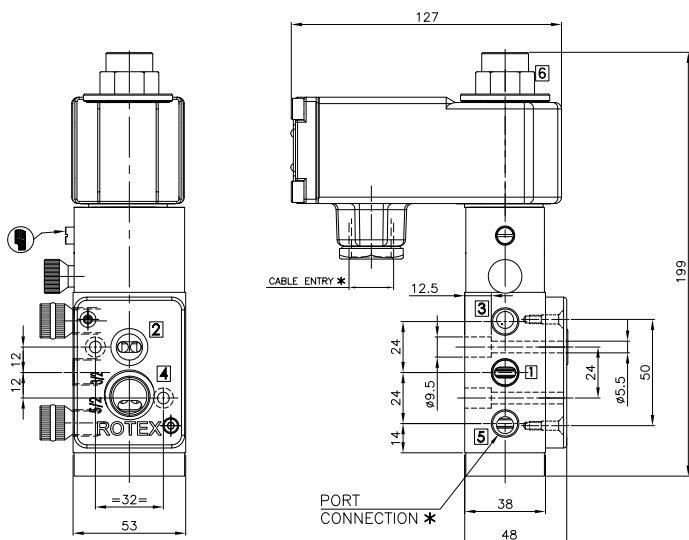
Callouts:

- 1: Cable gland body
- 2: Cable gland body
- 3: Cable gland body
- 4: Cable gland body
- 5: Cable gland body
- 6: Cable gland body

Other labels:

- CABLE ENTRY
- Ø6.5 (Ø0.25)
- 3/2
- 5/2

Valve Type : 51450V02, 51450, 51450V02LW, 51450V02IS, 51450LW, 51450V02L4, 51450L4, 51450IS											
NW	K	A	C	D	E	F	G	H	I	M	N
6 (¼")	¼"	53 (2.09)	198 (7.79)	24 (0.94)	32 (1.26)	48 (1.89)	25 (0.98)	24 (0.94)	24 (0.94)	38 (1.50)	22.5 (0.88)
12 (½")	½"	75 (2.95)	235 (9.25)	40 (1.57)	45 (1.77)	65 (2.56)	28 (1.10)	37.5 (1.48)	36 (1.42)	43 (1.69)	40 (1.57)

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