

SUBMITTAL



P.O. BOX 595, TROY, NEW YORK 12181
TEL 518 274 0961 - FAX 518 274 0210
WWW.ROSSVALVE.COM

SUBMITTAL

**42WRS Pump Control Valve with
Emergency Quick Close**

ROSS TECHNOLOGY PARK
75 102ST STREET, TROY, NY 12181
TEL 518.274.0961 - WWW.ROSSVALVE.COM



SUBMITTAL NOTES

PROJECT: _____

Ross Model 42WRS – Booster Pump Control Valve

Size: _____ inch / mm

Every Ross Valve shall be hydrostatically tested for body integrity and tight seating at the factory prior to shipment . Field operating conditions are simulated, and the controls are adjusted for proper operation. In order to design and test each valve under operating conditions similar to those in the field, please complete / confirm the following:

- Normal pumping pressure _____ psi
- Pump shut-off head _____ psi
- System static _____ psi
- Voltage available to operate electrical controls: _____ VAC, _____ Hz or _____ VDC

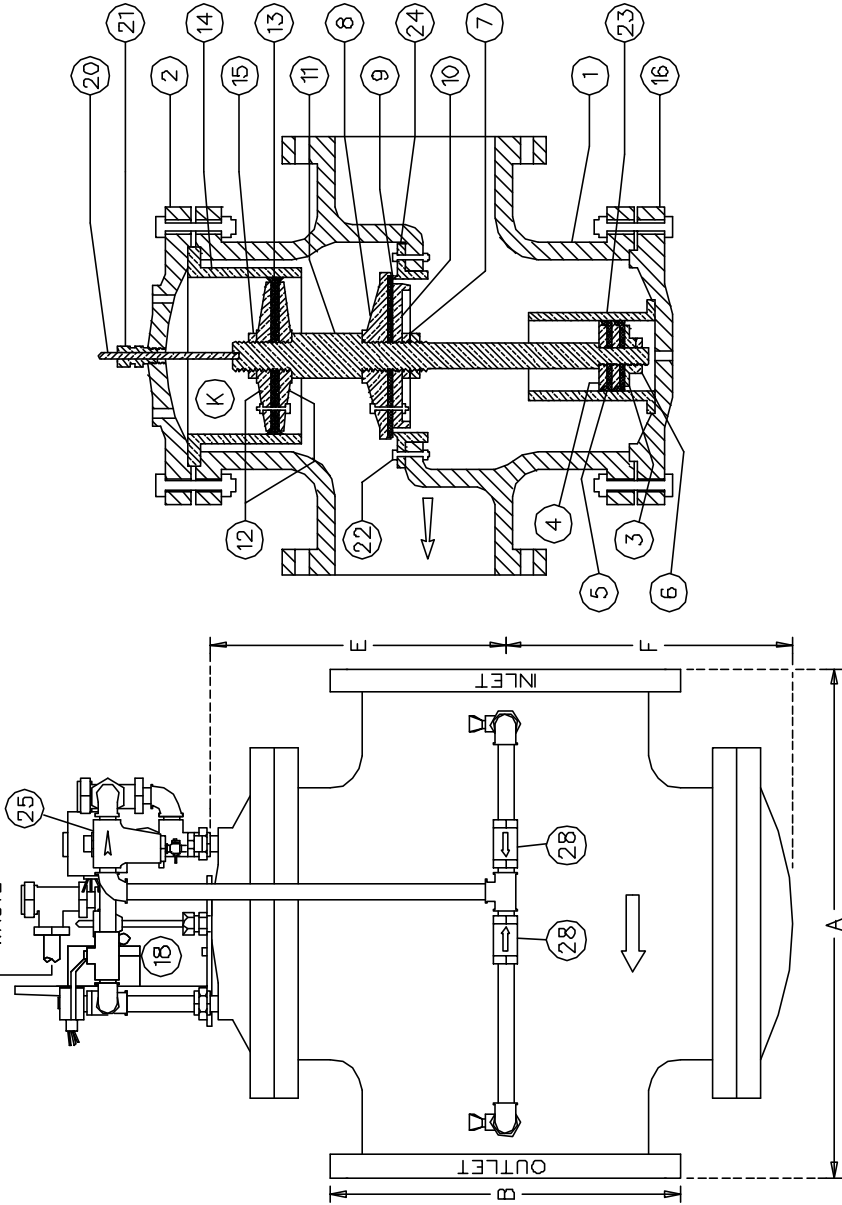
The Ross Globe Body Style Valve can be installed in any position. In order to properly design the valve and orient the controls, please confirm the physical layout of the installation. (** Designates standard valve orientation.)

Valve inlet & outlet (flow) : [] Horizontal ** or [] Vertical
 Valve piston axis : [] Vertical ** or [] Horizontal [] Horizontal

The valve shall be furnished with:

- ANSI B16.1 Class 250 cast iron body & cap, with: [] Class 125 flanges [] Class 250 flanges
- Internal metal parts - Bronze construction
- ASCO Series 8300 3-Way Solenoid valve with Manual Operator (part #27).
- Micro-Switch Series OP-AR Limit Switch Assembly (part #29)
- Ross Model 5F2 Strainer (part #25) with Stainless Steel Filter Element and Blow -Off
- Two (2) Ross Standard Fine-Thread Needle Valves: Opening Control (part #32) and Closing Control (part #33)
- Isolation valves: 0.5" Ball Valves, Bronze/Stainless Steel (part #18)
- Position Indicator, Bronze (part #20)
- Red brass pipe fittings and rigid control piping
- Tapped ports with gauge cocks on i nlet & outlet (gauges by others)
- PAINTING: Ferrous surfaces of valve shall be coated with ANSI/NSF Standard 61 Certified Epoxy (Tnemec Series N140F)
 - Meets the performance requirements of AWWA D102 Inside System No. 1.
- Operation & Maintenance Manual (shipped with the valve).
- ~~AWWA D102~~ Emergency Closing solenoid, ASCO Series 8210 2-Way, N.O. (part #26)

The valve will be constructed with materials and options stated on this notes page & cut view drawing & quote only, any changes or adders will be reviewed by Ross Valve Mfg. Co., Inc. with possible additional charges to quoted valve pricing. All information following the cut view drawing is for general information. Any special submittal requirements will be an additional charge to purchaser. The Ross Valve Mfg. Co., Inc. reserves the right to modify valve construction which will result in equal or superior performance to existing designs. These modifications may be made at any time and at the sole discretion of the manufacturer.



VALVE SIZE (IN)	ANSI B.16 CLASS	SHIPPING WEIGHT (LBS)	DIMENSIONS (INCHES)			E&F
			A	B	C&D	
4	125 250	235 275	14 14-5/8	9 10	4-3/4 4-3/4	7 7
6	125 250	375 430	17-3/4 17-3/4	11 12-1/2	6-5/8 6-5/8	9 9
8	125 250	690 750	24 24-13/16	13-1/2 15	8-3/4 8-3/4	12-1/2 12-1/2
10	125 250	920 1000	24-7/8 26-1/4	16 17-1/2	10 10	14-1/4 14-1/4
12	125 250	1375 1475	30 31-1/2	19 20-1/2	12 12	15-1/2 15-1/2
14	125 250	1770 1850	34-1/4 35-5/4	21 23	14 14	18 18
16	125 250	2400 2600	37-7/8 39-1/4	23-1/2 25-1/2	15 15	21-1/2 21-1/2

PART	DESCRIPTION	QTY.	MATERIAL
1	VALVE SHELL	1	CAST IRON
2	TOP CAP	1	CAST IRON
3	BOTTOM STEM GUIDE NUT	1	BRONZE
4	BOTTOM CUP FOLLOWERS (SET OF 2)	1	BRONZE
5	PISTON CUP PACKING	2	LEATHER
6	BOTTOM STEM LOCK NUT	1	BRONZE
7	STEM NUT	1	BRONZE
8	SEAT DISC	1	BRONZE
9	SEAT PACKING	1	POLYURETHANE
10	SEAT PACKING SUPPORT	1	BRONZE
11	STEM	1	BRONZE
12	MAIN CUP PLATES (SET OF 2)	1	BRONZE
13	MAIN CUP PACKING	2	LEATHER
14	MAIN BUSHING	1	BRONZE
15	TOP STEM NUT	1	BRONZE
16	BOTTOM CAP	1	CAST IRON
18	ISOLATION VALVE	2	BRONZE
20	INDICATOR ROD	1	BRONZE
21	INDICATOR STUFFING BOX	1	BRONZE
22	BOLTS & NUTS (SEAT RING)	VARY	BRONZE
23	BOTTOM CAP CYLINDER	1	BRONZE
24	SEAT RING	1	BRONZE
25	STRAINER	1	BRONZE/STAINLESS
26	SOLENOID 2-WAY - EMERGENCY	1	BRONZE/STAINLESS
27	SOLENOID 3-WAY - NORMAL	1	BRONZE/STAINLESS
28	CHECK VALVE	2	BRONZE
29	LIMIT SWITCH ASSEMBLY	1	MISC
32	NEEDLE VALVE - OPENING CONTROL	1	BRONZE
33	NEEDLE VALVE - CLOSING CONTROL	1	BRONZE
	BOLTS & NUTS (TOP & BOTTOM CAP)	VARY	STEEL
	BOLTS & NUTS (CUP PLATES)	VARY	BRONZE
	BOLTS & NUTS (SEAT DISC)	VARY	BRONZE
	BOLTS (BOTTOM CAP CYLINDER)	VARY	BRONZE
	INDICATOR ROD PACKING (SET)	1	TEFLON
	COVER & MAIN BUSHING GASKETS	3	COMPOSITION
	STEM GASKETS	3	COMPOSITION

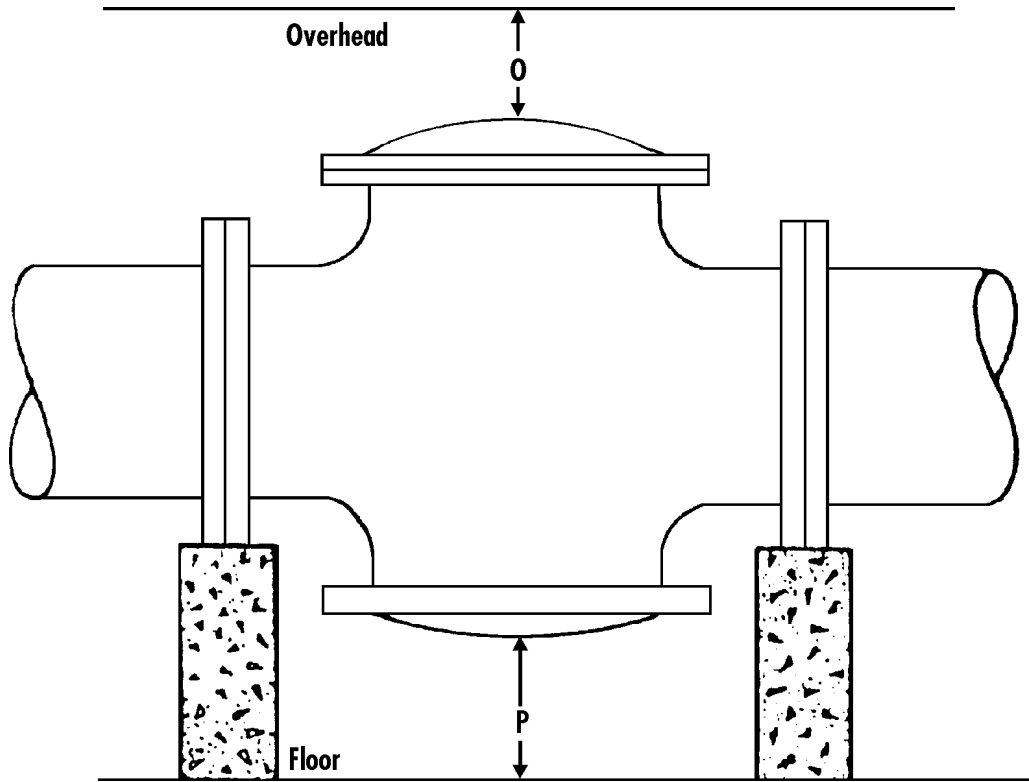
ROSS VALVE Mfg. Co., Inc.
 6 OAKWOOD AVENUE - TROY, NEW YORK, 12180 - TEL. (518) 274 0961
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 WEBSITE: www.rossvalve.com - E-MAIL: sales@rossvalve.com

DRAWING 42WR-S DATE 12-22-00 RJC
 GLOBE BODY 4" - 16" NO SCALE FIGURE 44EC
 Model 42WR-S
 PUMP CONTROL VALVE (ELECTRIC CHECK)
 WITH EMERGENCY CLOSE FEATURE

DIMENSIONS

Globe Body Minimum Clearances

Piston Valve Sizes: 4" - 36"



Size (Inches)	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"	36"
O	14	16	18	21	23	28	28	33	33	36	43	46
P	4 1/2	5 1/2	6 1/2	1	1	1	1	1	1	1	1	1

Note

1. Dimension "O" is clearance for removal of the top cap and piston for repacking the main valve. Additional working space for the convenience of the service man should be considered above as well as around the valve.
2. Dimension "P" as listed is the desirable clearance under the valve for removal of the STANDARD bottom cap. This dimension may be reduced to 1 inch for all valves on special applications.

Note

- A. **Do not obstruct vent hole located at the center of the bottom cap.**
- B. Consideration should be given for installation of valves 14" or larger under manhole in the roof of the valve vault or for additional clearance above the valve since a mechanical hoist will probably be required for removal of the piston. An eye bolt or hook cast in the cover slab over the center of the valve is useful.
- C. If clearance under the valve is limited, dimensions "O" and "P" can be modified. Consult the factory concerning special applications.

Features

- Designed for high flow and high pressure service.
- Direct acting, requires no minimum operating pressure.
- Choice of metal seating materials to handle aggressive fluids, or resilient seating for airtight shutoff.
- Ideal for power plants and similar applications.

Construction

Valve Parts in Contact with Fluids		
Body	Brass	304 Stainless Steel
Disc	303 Stainless Steel (Metal), PA or Brass (Resilient)	
Seats	NBR, Phosphor Bronze	303 Stainless Steel
Core Tube	305 Stainless Steel	
Core and Plugnut	430 F Stainless Steel	
Springs	302 Stainless Steel, 17-7PH or Inconel	
Shading Coil	Copper	Silver
Gaskets	NBR	PTFE

Electrical

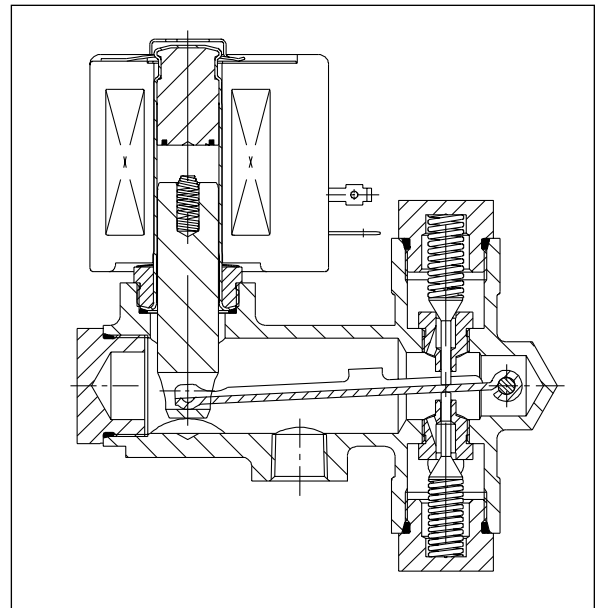
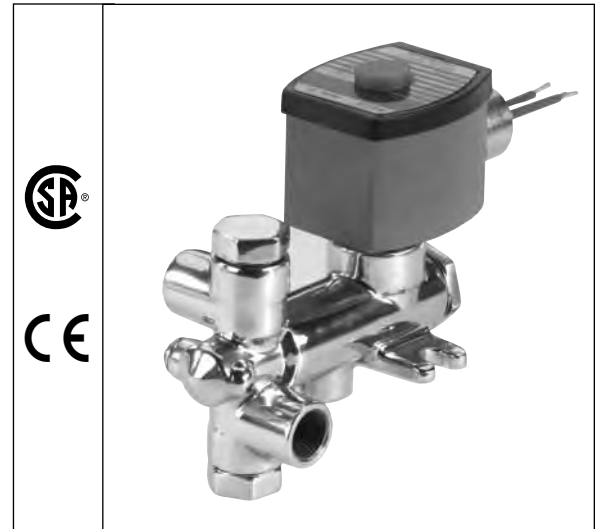
Standard Coil and Class of Insulation	Watt Rating and Power Consumption				Spare Coil Part Number			
	DC Watts	AC			General Purpose		Explosionproof	
		Watts	VA Holding	VA Inrush	AC	DC	AC	DC
F	-	20.1	43	240	272610	-	272614	-
H	36.2	28	60	330	222345	222184	222345	222184
H	-	16.1	35	180	272810	-	272814	-
H	-	28.2	50	385	224195	-	224195	-

Standard Voltages: 24, 120, 240, 480 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz). 6, 12, 24, 120, 240 volts DC. Must be specified when ordering.

Note: 125 and 250 volts DC are battery voltages applied in power plants. Special AC and DC constructions are available to pilot power plant control valves. Consult your local ASCO sales office for details.

Solenoid Enclosures

Standard: Red-Hat II - Watertight, Types 1, 2, 3, 3S, 4, and 4X; Red-Hat - Type 1.
Optional: Red-Hat II - Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9; Red-Hat - Explosionproof and Watertight, Types 3, 4, 4X, 7, and 9. See footnote on next page.
(To order, add prefix "EF" to catalog number.)
See *Optional Features Section* for other available options.



Nominal Ambient Temperature Ranges:

Class F Coils AC: 32°F to 125°F (0°C to 52°C)

Class H Coils AC: 32°F to 140°F (0°C to 59°C)

Class H Coils DC: 32°F to 77°F (0°C to 25°C)
(104°F/40°C occasionally)

Refer to *Engineering Section* for details.

Approvals:

CSA certified. Meets applicable CE directives.

Refer to *Engineering Section* for details.

Features

- Wide range of pressure ratings, sizes, and resilient materials provide long service life and low internal leakage
- High Flow Valves for liquid, corrosive, and air/inert gas service
- Industrial applications include:
 - Car wash
 - Laundry equipment
 - Air compressors
 - Industrial water control
 - Pumps

Construction

Valve Parts in Contact with Fluids		
Body	Brass	304 Stainless Steel
Seals and Discs	NBR or PTFE	
Disc-Holder	PA	
Core Tube	305 Stainless Steel	
Core and Plugnut	430F Stainless Steel	
Springs	302 Stainless Steel	
Shading Coil	Copper	Silver

Electrical

Standard Coil and Class of Insulation	Watt Rating and Power Consumption				Spare Coil Part Number			
	DC Watts	AC			General Purpose		Explosionproof	
		Watts	VA Holding	VA Inrush	AC	DC	AC	DC
F	-	6.1	16	40	238210	-	238214	-
F	11.6	10.1	25	70	238610	238710	238614	238714
F	16.8	16.1	35	180	272610	97617	272614	97617
F	-	17.1	40	93	238610	-	238614	-
F	-	20	43	240	99257	-	99257	-
F	-	20.1	48	240	272610	-	272614	-
H	30.6	-	-	-	-	74073	-	74073
H	40.6	-	-	-	-	238910	-	238914

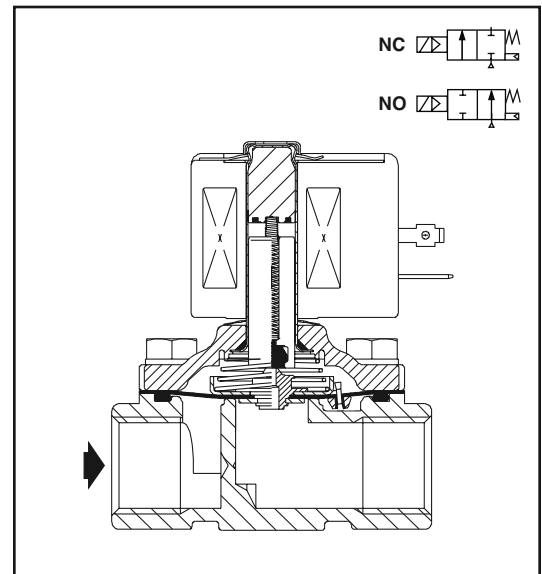
Standard Voltages: 24, 120, 240, 480 volts AC, 60 Hz (or 110, 220 volts AC, 50 Hz). 6, 12, 24, 120, 240 volts DC. Must be specified when ordering.
 Other voltages available when required.

Solenoid Enclosures

Standard: RedHat II - Watertight, Types 1, 2, 3, 3S, 4, and 4X; RedHat - Type I.

Optional: RedHat II - Explosionproof and Watertight, Types 3, 3S, 4, 4X, 6, 6P, 7, and 9; Red-Hat - Explosionproof and Watertight, Types 3, 4, 4X, 7, and 9.

(To order, add prefix "EF" to catalog number, except Catalog Numbers 8210B057, 8210B058, and 8210B059, which are not available with Explosionproof enclosures.)
 See *Optional Features Section* for other available options.



Nominal Ambient Temp. Ranges

RedHat II/
 RedHat AC: 32°F to 125°F (0°C to 52°C)

RedHat II DC: 32°F to 104°F (0°C to 40°C)
 RedHat DC: 32°F to 77°F (0°C to 25°C)
 (104°F/40°C occasionally)

Refer to *Engineering Section* for details.

Approvals

CSA certified. RedHat II meets applicable CE directives.

Refer to *Engineering Section* for details.

LIMIT SWITCH

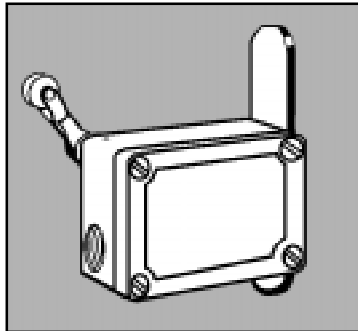
Located:

Wherever an electric switch control is needed.

Contact: 10 AMP

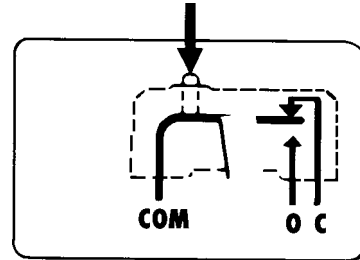
Purpose:

1. To signal if the valve is opened or closed.
2. To start or stop allied equipment.



ROSS ADVANTAGE

Because it is waterproof, the switch can be used anywhere.



- O - Normally open contact
- C - Normally closed contact
- COM - Common

Note: A double pole switch (2 N.O. and 2 N.C.) contacts can be supplied as an extra.

Operation

Performs as an on/off switch.

Factory: Telephone (518) 274-0961; Fax (518) 274-0210

Limit and Enclosed Switches

OP Series

Enclosed Switches



FEATURES

- Cast aluminum housing
 - Mounts from 4 sides
 - Cover seal, captive cover screws
 - Momentary contact
 - UL Recognized, file #E12252
 - CSA Certified, file #LR57325
 - Grounding screw
 - NEMA 1, 3*, 4* and 13*
- (* Except Q-plunger and high temperature types)

ELECTRICAL RATING

Circuitry	Electrical Rating
<p>Single-pole Double-throw</p>	<p>A</p> <p>UL/CSA Rating: 15 amps, 125, 250 or 480 VAC; 1/8 Hp, 125 VAC; 1/4 Hp, 250 VAC; 1/2 amp, 125 VDC; 1/4 amp, 250 VDC.</p>

OP enclosed switches are precision snap-action switches sealed in rugged cast aluminum housings. Cover and shaft seals keep out moisture and other contaminants on rotary operated switches. The plungers in the Q-plunger version are not sealed.

Refer to page A123 for explosion-proof Type EX switches, which are dimensionally interchangeable with OP switches.

N = Newtons

* Actuation is designated as CW (clockwise) or CCW rotation, when looking at the switch nameplate.

† Choice of levers available for use with OP-AR20:
6PA5-EX (non-sparkling roller), **6PA6-OP** (steel roller), **6PA127-EX** (nylon roller), **6PA130-EX** (CW), **6PA142-EX** (CCW), and **6PA136-EX** (Aluminum rod).

Characteristics: O.F. — Operating Force; P.T. — Pretravel; O.T. — Overtravel; D.T. — Differential Travel

For rapid response – off the shelf service, all **bold face** listings are normally stocked items.

Description	Elec. Rating	Catalog Listing	O.F.	P.T.	O.T.	D.T.
				max. mm in.	max.	max. mm in.
Roller Lever is field adjustable through 360°	A	OP-AR	2,22-5,56 N .5-1.25 lbs.	5,56 .219 (8°)	90°	0,18 .007 (.25°)

STRAINER

Model Number: 5F-2

Sizes: ½" – 1"

Located: On any external piping

Purpose: To protect external piping and control devices from fouling or damage from foreign particles

Screen: Cylindrical Dutch weave stainless steel wire mesh

Piping Connection: Standard pipe thread

Operation

1. Water enters the cylindrical screen (#2) from the top and passes out through the sides of the cylinder.
2. Any particle too large to pass through .012 inch openings gets trapped in the cylinder, where, unless there is unusual turbulence, they settle at the bottom.

Recommendation

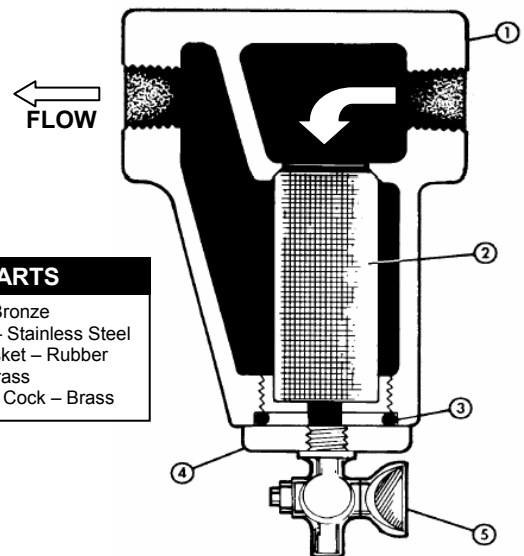
1. Strainer should be "blown down" frequently to remove collected foreign material from the sediment chamber.
2. Strainer screen should be removed occasionally for inspection and thorough cleaning.

Note

1. To clean without shutting down the line, open the flush cock (#5) in the bottom cap (#4) for several seconds.
2. To remove the screen (#2), which requires shutting down the line, unscrew the bottom cap assembly (#5).

Option

Two strainers installed in parallel (with the appropriate isolation valves) to permit uninterrupted service while cleaning.



PARTS

1. Body – Bronze
2. Screen – Stainless Steel
3. Cap Gasket – Rubber
4. Cap – Brass
5. Flushing Cock – Brass

NEEDLE VALVE

Sizes: One size fits all piston valves

Primarily Controlled By: Manually Adjusted

Located: On external control circuit of the main valve

Purpose: To limit flow in and out of the operating chamber

Standard Shipped Adjustment:

Course Needle: 5/6 to 2 turns off the seat

Fine Needle: Based on individual specifications

Operation

The simple construction reliably limits maximum flow through the external piping, depending on the position of the adjustable stem/needle (#4) relative to the seat.

1. When the needle (#4) is adjusted counter-clockwise to a raised position,
 - a. More water can pass through the needle valve.
 - b. Water enters (leaves) the operating chamber more quickly.
 - c. The main valve piston moves up and down more quickly.
2. When the needle (#4) is adjusted clockwise to a lowered position,
 - a. Less water can pass through the needle valve.
 - b. Water enters (leaves) the operating chamber more slowly.
 - c. The main valve piston moves up and down more slowly.

Adjustment

To adjust needle valve, which can be done without shutting down the main valve:

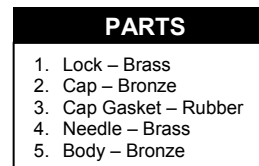
1. Remove the hex cap (#2) and lock (#1).
2. With a screw driver;
 - a. Turn the needle (#4) counter-clockwise to raise it
 - b. Turn the needle (#4) clockwise to lower it
3. Once the optimum position is determined, no further adjustment of the needle should be required.

Note

It is advisable to occasionally remove the cap (#2) and lock (#1) and change the position of the needle (#4) momentarily to insure against gradual plugging.

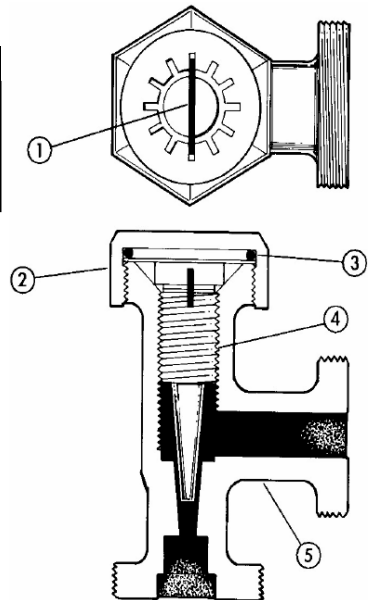
Option

Two separate needle valves on one main valve – Provides independent control of opening and closing speeds.



PARTS

1. Lock – Brass
2. Cap – Bronze
3. Cap Gasket – Rubber
4. Needle – Brass
5. Body – Bronze



(Factory Accelerated) Pota-Pox™ Plus

SERIES N140F

PRODUCT PROFILE

GENERIC DESCRIPTION	Polyamidoamine Epoxy
COMMON USAGE	Innovative potable water coating which offers high-build edge protection and allows for application at a wide range of temperatures (down to 35°F or 2°C). For use on the interior and exterior of steel or concrete tanks, reservoirs, pipes, valves, pumps and equipment in potable water service.
COLORS	F1211 Fast Cure Red, F1255 Fast Cure Beige, 11WH Fast Cure White, 15BL Fast Cure Tank White, 39BL Fast Cure Delft Blue, 35GR Fast Cure Black. Note: Epoxies chalk with extended exposure to sunlight. Lack of ventilation, incomplete mixing, miscatalyzation or the use of heaters that emit carbon dioxide and carbon monoxide during application and initial stages of curing may cause yellowing to occur.
SPECIAL QUALIFICATIONS	Certified by NSF International in accordance with ANSI/NSF Std. 61 . Ambient air cured Series N140F is qualified for use on tanks and reservoirs of 1,000 gallons (3,785L) capacity or greater, pipes ten (10) inches (25 cm) in diameter or greater and valves two (2) inches (5 cm) in diameter or greater. Conforms to AWWA D 102 Inside Systems No. 1 and No. 2 . Contact your Tnemec representative for systems and additional information.
PERFORMANCE CRITERIA	Extensive test data available. Contact your Tnemec representative for specific test results.



COATING SYSTEM

PRIMERS	Self-priming, 20, FC20, 91-H2O
TOPCOATS	Interior: Series N140F Exterior: Series 27, 66, N69, 73, N140, 161, 175, 180, 700, 1074, 1075. Refer to COLORS on applicable topcoat data sheets for additional information. Note: When topcoating with Series 700, an intermediate coat of Series 73 or 1075 is required. Note: The following maximum recoat time applies when using Endura-Shield topcoats: Series 73, 175, 1074 or 1075, sixty (60) days. If this time limit is exceeded, Series N140F must be uniformly scarified or recoated with itself prior to applying Endura-Shield. When topcoating with Series 180, the N140F maximum recoat time is 90 days.

SURFACE PREPARATION

STEEL	Immersion Service: SSPC-SP10/NACE 2 Near-White Blast Cleaning Non-Immersion Service: SSPC-SP6/NACE 3 Commercial Blast Cleaning
PRIMED STEEL	Immersion Service: Scarify the Series N140F, 20 or FC20 prime coat surface by abrasive-blasting with fine abrasive before topcoating if it has been exterior exposed for 60 days or longer and N140F is the specified topcoat.
CAST/DUCTILE IRON	Contact Tnemec Technical Services.
CONCRETE	Allow new concrete to cure 28 days. For optimum results and/or immersion service, abrasive blast referencing SSPC-SP13/NACE 6 Surface Preparation of Concrete and Tnemec's Surface Preparation and Application Guide. Fill all holes, pits, voids and cracks with 63-1500 Filler and Surfacers.
ALL SURFACES	Must be clean, dry and free of oil, grease and other contaminants.

TECHNICAL DATA

VOLUME SOLIDS*	68.0 ± 2.0% (mixed)			
RECOMMENDED DFT	3.0 to 8.0 mils (75 to 205 microns) per coat. Note: Number of coats and thickness requirements will vary with substrate, application method and exposure. Contact your Tnemec representative.			
CURING TIME AT 5 MILS DFT	Temperature	To Handle	To Recoat	Immersion
	75°F (24°C)	4 hours	5 hours	7 days
	65°F (18°C)	7-8 hours	9-11 hours	8 days
	55°F (13°C)	12-14 hours	16-20 hours	9-10 days
	45°F (7°C)	18-22 hours	28-32 hours	12-13 days
	35°F (2°C)	28-32 hours	46-50 hours	16-18 days
VOLATILE ORGANIC COMPOUNDS*	Unthinned 2.29 lbs/gallon (274 grams/litre)		Thinned 10% 2.71 lbs/gallon (324 grams/litre)	
THEORETICAL COVERAGE*	1,094 mil sq ft/gal (26.8 m ² /L at 25 microns). See APPLICATION for coverage rates.			
NUMBER OF COMPONENTS	Two: Part A and Part B			
PACKAGING	5 gallon (18.9L) pails and 1 gallon (3.79L) cans — Order in multiples of 2.			
NET WEIGHT PER GALLON*	13.45 ± 0.25 lbs (6.10 ± .11 kg) (mixed)			
STORAGE TEMPERATURE	Minimum 20°F (-7°C)		Maximum 110°F (43°C)	
	For optimum application properties, material temperature should be above 60°F (16°C) prior to application.			
TEMPERATURE RESISTANCE	(Dry) Continuous 250°F (121°C)		Intermittent 275°F (135°C)	

Published technical data and instructions are subject to change without notice. The online catalog at www.tnemec.com should be referenced for the most current technical data and instructions or you may contact your Tnemec representative for current technical data and instructions.
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TECHNICAL DATA continued

SHELF LIFE 24 months at recommended storage temperature.
FLASH POINT - SETA Part A: 82°F (28°C) Part B: 80°F (27°C)
HEALTH & SAFETY Paint products contain chemical ingredients which are considered hazardous. Read container label warning and Material Safety Data Sheet for important health and safety information prior to the use of this product. **Keep out of the reach of children.**

APPLICATION

COVERAGE RATES*

	Primer			Intermediate / Topcoat		
	Dry Mills (Microns)	Wet Mills (Microns)	Sq Ft/Gal (m ² /Gal)	Dry Mills (Microns)	Wet Mills (Microns)	Sq Ft/Gal (m ² /Gal)
Suggested (1)	4.0 (100)	6.0 (150)	273 (25.4)	5.0 (125)	7.5 (190)	218 (20.3)
Minimum	3.0 (75)	4.5 (115)	364 (33.9)	4.0 (100)	6.0 (150)	273 (25.4)
Maximum	5.0 (125)	7.5 (190)	218 (20.3)	6.0 (150)	9.0 (230)	182 (17.0)

(1) Note: Roller or brush application requires two or more coats to obtain recommended film thickness. Series N140F can be spray applied to an optional high-build film thickness range of 6.0 to 8.0 dry mils (150 to 205 dry microns) or 8.5 to 11.5 wet mils (215 to 290 wet microns). Allow for overspray and surface irregularities. Film thickness is rounded to the nearest 0.5 mil or 5 microns. Application of coating below minimum or above maximum recommended dry film thicknesses may adversely affect coating performance.

MIXING

1. Start with equal amounts of both Parts A & B.
2. Using a power mixer, separately stir Parts A & B.
3. Add Part A to Part B under agitation, stir until thoroughly mixed.
4. Both components should be above 50°F (10°C) prior to mixing. For application to surfaces between 35°F to 50°F (2°C to 10°C), allow mixed material to stand thirty (30) minutes and restir before using. For optimum application properties, blended components should be above 40°F (4°C).

POT LIFE

4 hours at 35°F (2°C) 2 hours at 77°F (25°C) 1 hour at 100°F (38°C)

THINNING

Use No. 4 Thinner. For air spray, thin up to 10% or ¾ pint (380 mL) per gallon. For airless spray, roller or brush, thin up to 5% or ¼ pint (190 mL) per gallon. **Caution:** Series N140F NSF certification is based on thinning with No. 4 Thinner. Use of any other thinner voids ANSI/NSF Std. 61 certification.

SURFACE TEMPERATURE

Minimum 35°F (2°C) Maximum 135°F (57°C)
 The surface should be dry and at least 5°F (3°C) above the dew point. Coating won't cure below minimum surface temperature.

APPLICATION EQUIPMENT

Air Spray

Gun	Fluid Tip	Air Cap	Air Hose ID	Mat'l Hose ID	Atomizing Pressure	Pot Pressure
DeVilbiss MBC or JGA	E	765 or 78	5/16" or 3/8" (7.9 or 9.5 mm)	3/8" or 1/2" (9.5 or 12.7 mm)	75-100 psi (5.2-6.9 bar)	10-20 psi (0.7-1.4 bar)

Low temperatures or longer hoses require higher pot pressure.

Airless Spray

Tip Orifice	Atomizing Pressure	Mat'l Hose ID	Manifold Filter
0.015"-0.019" (380-485 microns)	1800-3000 psi (124-207 bar)	1/4" or 3/8" (6.4 or 9.5 mm)	60 mesh (250 microns)

Use appropriate tip/atomizing pressure for equipment, applicator technique and weather conditions.
Note: Application over inorganic zinc-rich primers: Apply a wet mist coat and allow tiny bubbles to form. When bubbles disappear in 1 to 2 minutes, apply a full wet coat at specified mil thickness.
Roller: Roller application optional when environmental restrictions do not allow spraying. Use 3/8" or 1/2" (9.5 mm or 12.7 mm) synthetic nap covers.
Brush: Recommended for small areas only. Use high quality natural or synthetic bristle brushes.

CLEANUP

Flush and clean all equipment immediately after use with the recommended thinner or MEK.

*Values may vary with color.

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TRAINING

Factory Training — Ross Valve believes that our customers should know as much as possible about our products. That is why we periodically host Customer Training seminars at our Ross Technology Park in Troy, NY. Here, our customers learn the workings of the valves, how to correctly maintain them, and how they are manufactured.

In addition, Ross representatives are often in the field giving product seminars for your convenience.

FIELD SERVICE

When a repair, upgrade, or modification is required for an existing Ross Valve, Factory Authorized Ross Service Technicians offer the best service available, including:

Technical assistance for start-up or continuing training.

Fully inventoried service vehicles to allow replacement of necessary parts.

Confined Space/OSHA trained with latest equipment

On-site / hands-on training for your staff.

Ability to return older valves to "like-new" condition.

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All valves and materials are guaranteed free from defects for 1 year from the date shipped.

Ross Valves are economically rebuilt. Every internal part is replaceable through the top of the valve, without removing it from the line. All seals and internal packings are replaceable, which contributes to the valve's longevity.

Ross Valve stocks a wide variety of repair parts which can be received by the customer as early as the next day. In-house computer links track packages to ensure timely delivery.

Detailed historical record keeping gives us a full report of all maintenance or upgrades that have been made on each valve. This allows us to evaluate performance in the past and maximize performance in the future.



ROSS VALVE

Automatic Control Valves & Pre-Packaged
Vaults for Water & Wastewater

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