



# Performance! Release

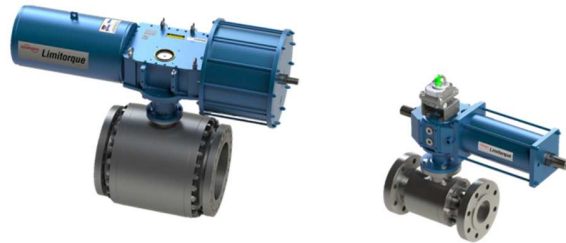
June 05, 2017

## Performance!Nxt Release 12.7180

Flowserve is pleased to announce the latest release of Performance!Nxt, the industry's foremost Control Valve Sizing, Selection and Project Management Software. Following are details about new product, features, enhancements implemented and issues resolved in this release.

### New Product: LFPS Act Sub

With the scope to continue growing Control Valves and Automation businesses, a new P!Nxt development has been recently completed, complementing past releases which included LPS and LPC actuators on TMCBV, TX3 and VALDISK valves.

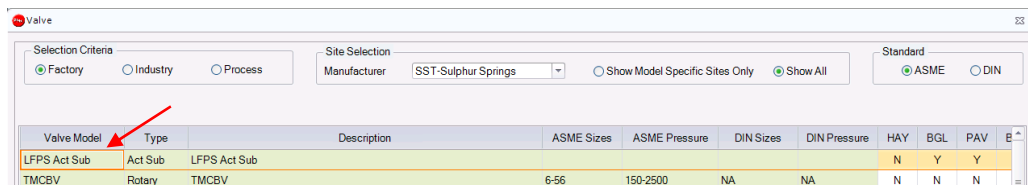


In this Release 12.7180 “LFPS Act Sub” valve type has been added and activated on all those sites for which LPS and LPC were previously enabled on TMCBV, TX3 and VALDISK control valves. More specifically the list of FLS Sites with this new feature enabled is:

Product Name	HAY	BGL	BMT	BTR	COR	COK	DPK	EDM	ESS	SQR	MEZ	MEL	PTH	PHI	PIT	VIL	SPR	LIN	THR	BRM	SIN	KNG	SUZ	PGE	ABH	KAO	EQR	S28-SST	S29	S30
LFPS Act Sub	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	No	No	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No	No

The new “LFPS Act Sub” feature allow Users to select a specific model of LPS and LPC actuators, independently from the selection of the valve; this new selection is often used when an actuator replacement has to be supplied or when just an actuator is requested.

This new selection has been created as “Valve Model” named “LFPS Act Sub” and it is available after selecting one of the above reported sites, during the New Item creation process.



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Inside User Interface of “LFPS Act Sub” it will be possible to manually select a given model of LPS or LPC actuators, using the dropdown menus of “Actuator Size” and “Spring Size” fields”.

The screenshot shows a configuration window with the following fields:

- Actuator Type: LPC
- Service: Modulating
- Supply Press.: [input field]
- Temp.: [input field]
- Unit: bar (g)
- Min: 13.00
- Max: 13.00
- Yoke: Symmetrical
- Act Config: Spring Return SA
- Fail Action: FC-FCW
- Air to: Open (selected), Close
- Shutoff Dp: P1 Max. 0.000 psi
- Actuator Size: LPC-12-235
- Spring Size: SR03
- Act Model: LPC-12A-235B-SR03

After selecting a specific LPS or LPC model, it is possible to visualize the relevant Output Torques inside the “Actuator Selection” screen and/or to print them out using Print menu.

Tag Number : test #24429

### Detailed Actuator Information

Valve Model : 18.00 in TMCBV      Trim : S /Cv:49000 Seat :SPE - SPE  
 Actuator Model : LPS-25A-535B-FC2-3      Air to : Open FAIL FC-FCW  
 Customer : 7030 T4      Available Air Supply / Max. Allow. Supply : 60.000/60.000 psi (g)  
 Project : Test      MAWP : 174.000 psi (g)      MOP : 104.950 psi (g)  
 Page Number : 17      Actuator Volume : 3844.4956 in3

Packing Torque : 0 in-lbf (:)  
 Bearing Torque Factor : 0.00 X DP in-lbf (Carbon Steel & Fiber PTFE)  
 Seat Torque : 0.00 in-lbf  
 Off Balance Torque Factor : 0.00 X DP in-lbf  
 Dyn Torque Fact : C1:0 C2:0 C3:0 C4:0

Fluid + Friction	Break to Open	Run to Open	End to Open	Break to Close	Run to Close	End to Close
Cond 1	---	---	---	---	---	---
Cond 2	---	---	---	---	---	---
Cond 3	---	---	---	---	---	---
Cond 4	---	---	---	---	---	---
Cond 5	---	---	---	---	---	---
Cond 6	---	---	---	---	---	---
Cond 7	---	---	---	---	---	---
Cond 8	---	---	---	---	---	---
Cond 9	---	---	---	---	---	---
Cond 10	---	---	---	---	---	---
Shutoff (0.0)	46664	29165	38789	46664	29165	38789
P1=P2=0	29165	29165	29165	29165	29165	29165
Act+Spring	86905	39397	57188	67981	29552	40452
Spring	-42690 !	-34311 !	-80217 !	67981	29552	40452

Units of the grid are :in-lbf

**Note:** Please remember that the Actuator Torques shown in both User Interface and “Actuator Details” printout are calculated at “Available Air Supply”, which corresponds to Minimum Supply Pressure (Pmin).



## Performance! Release

### User Interface Updates related to LPS and LPC actuators:

#### Addition of Actuator volume, MAWP and MOP values for LPS/LPC

With the scope to provide P!NXT Users with extended information about the selected LPS and LPC actuator models, three new attributes are now provided inside the User Interface and inside the Printouts:

- Actuator Volume
- MAWP – Maximum Allowable Working Pressure
- MOP – Maximum Operating Pressure

The Engineering Units adopted for those three additional attributes are specified inside the “Sizing Parameters”. Their values can be visualized inside the UI in the following area:

Size + Spring	<input checked="" type="checkbox"/> LPS-15A-255-LPS2-1	<input type="checkbox"/> LPS-15A-255-LPS3-1	<input type="checkbox"/> LPS-15A-255-LPS3-3	<input type="checkbox"/> LPS-15A-255-LPS3-4
Break to Open	1225	742	234	1733
RunToOpen	555	101	-754	842
End to Open	805	101	-754	1343
Break to Close	1149	1750	2479	1147
Run to Close	525	817	1150	524
End to Close	771	1234	1722	769

MAWP	12.00	bar (g)
MOP	12.00	bar (g)
Act. Volume	9.2000	Liter

**Note:** when a Violation Message relevant to MAWP or to MOP is present, User will find it on the right side of the Selection Screen and in addition will see the value field of MAWP or MOP shown with a red color font.

As alternative, those three new attributes can be also displayed in the Spec Sheet or Actuator Details as part of the “Actuator Details” header section:



Tag Number : test #23776

### Detailed Actuator Information

Valve Model : 10118.00 in LFPS Act Sub	Trim : -- Seat :
Actuator Model : LPS-15A-255B-FC2-1	Shaft Down, Air to : Open, FAIL, EC, ECW
Customer : 7030 T4	Available Air Supply / Max. Allow. Supply : 4.140/13.000 bar (g)
Project : Test	MAWP : 12.000 bar (g)      MOP : 12.000 bar (g)
Page Number : 18	Actuator Volume : 9.2000 Liter

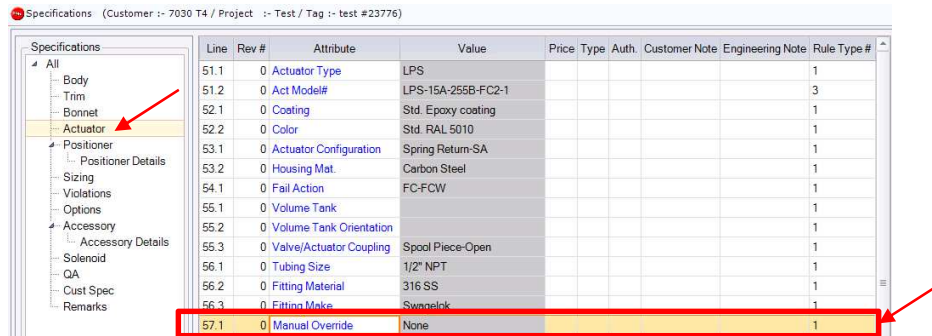
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# Performance! Release

## Manual Override options for LPS/LPC

The available Manual Override Options for LPS and LPC have been updated in 12.7180 Release, and User will be able to select them inside the Specification Screen under the Actuator tab, attribute 57.1:



Once a Manual Override Option is selected, the LPS and LPC model will be updated with an additional suffix of two (2) digits, corresponding to the selection:

- Handwheel Jackscrew –JL
- Handwheel Enclosed –JS
- Handwheel Bevel Gear –BG
- Hydraulic Hand Pump –HP

The LPC and LPS options are in accordance with the following selection table:

		Manual Overrides for Pneumatic Actuators											
Suffix	Description	LPS Actuator Model								LPC Actuator Model			
		LPS-15	LPS-20	LPS-25	LPS-30	LPS-35	LPS-40	LPS-50	LPS-60	LPC-05	LPC-10	LPC-12	LPC-14
-JL	Jackscrew Light Handwheel	✓ (*)	✓ (*)	-	-	-	-	-	-	✓	✓	✓	✓
-JS	Enclosed Jackscrew Handwheel	✓	✓	-	-	-	-	-	-	-	-	-	-
-BG	Bevel Gear Manual Override	-	-	✓	✓	-	-	-	-	-	-	-	-
-HP	Hydraulic Manual Hand Pump	✓	✓	✓	✓	✓	✓	✓	✓	-	-	-	-

(\*) Only for Single Acting Spring Return configuration; for Double Acting configuration only "-JS" is applicable with dedutchable feature



## Performance! Release

Please find hereafter a brief description of the four available options:

### JL Jackscrew Light Handwheel

- Simple and economical manual override option
- Direct operating handwheel screwed on the cylinder/housing side
- Rotating and sliding threaded external screw
- Integral and adjustable not-enclosed travel stop
- Handwheel may be optionally replaced by portable wrench



LPS Single Acting with -JL

### JS Enclosed Jackscrew Handwheel

- Design totally enclosed and protected from ambient environment
- Suitable for severe and saline environmental conditions
- Direct operating handwheel screwed on the cylinder/housing side
- Integral and adjustable not-enclosed travel stop; enclosed type as option
- Declutch feature suitable for double acting actuators



LPS Single Acting with -JS

### BG Bevel Gear Manual Override \*

- Bevel gearbox system with manual handwheel
- Handwheel easy frontal access
- Reduction gear to operate large size actuators with low efforts
- Integral and adjustable not-enclosed travel stop; enclosed type as option
- No interference with valve top mounting and/or piping layout



LPS Single Acting with -BG

\* Sandwich De-Clutchable Worm gear manual override available as option upon request

### HP Hydraulic Manual Hand Pump

- Low-effort and high thrust/torque override
- Suitable for all models sizes, especially for large actuators
- Power pack with hand-lever-operated high pressure pump connected to a hydraulic cylinder
- Self-contained design with minimum number of fittings
- Hydraulic tank with pressure relief and oil level indicator
- Lever manual force according to EN 12570 requirements
- Integral and adjustable enclosed travel stop
- Optional flow regulating valves for a smooth operation



LPS Single Acting with -HP

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### Optimized Selection between LPS and LPC actuators

With the scope to assist Users in selecting the proper product range between LPC (suitable for small valve sizes) and LPS (suitable for medium/large valve sizes) an additional optimization option has been added in User Interface to allow User to let P!NXT propose the most economical actuator model based on specific Valve Torque requirements and other Sizing Parameters. The new feature can be selected by flagging the “LPS/LPC” area.

- By selecting “LPS/LPC” option when LPS Actuator Type is also selected, then P!NXT will automatically select a “LPC model” if suitable or a “LPS model” if this is the only choice for the requested valve torques and the applicable sizing parameters.
- By selecting “LPS/LPC” option when LPC Actuator Type is also selected, then P!NXT will automatically select a LPS model in those cases in which the valve torques and sizing parameters would not allow to find a suitable LPC model.

### Addition of Air Supply value for LPS/LPC/LFPS Act Sub

Inside this 12.7180 Release when User selects “Max Allow Supply”, then both values of Min Air Supply and Max Allow Supply are shown inside the Spec Sheet (Row 16) and also inside the “Actuator Details Screen”:

**Note:** please note that the Actuator Torques shown in both User Interface and “Actuator Details” printout are calculated at “Available Air Supply”, which corresponds to Minimum Supply Pressure (Pmin).

Spec Sheet example:

Proce	15		
	16	Available Air Supply / Max. Allow. Supply	4.140 / 13.000 bar (g)
	17		

Actuator Details example:

Detailed Actuator Information		
LPS	LPS-15A-255B-FC2-1	MAWP : 12.000 bar (g)
Seatload Required()	0 Kg/Cm (0 N)	MOP : 12.000 bar (g)
Actual : 0 Kg/Cm	Failed : 0 Kg/Cm	Actuator Volume : 9.200 Liter
Available Air Supply / Max. Allow. Supply : 4.140/13.000 bar (g)		
Units of the grid are : Nm		

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### Nomenclature adjustment of LPS/LPC models

As minor bug fixing, the header of the “Actuator Comparison/Selection” grid has been now improved adopting the correct dash “-“ sign inside the actuator nomenclature.

Please note that inside the above grid the Fail Action (Fail Close/CW and Fail Open (CCW) are not shown, as well as Temperature Range; that information is displayed just on the left side area, inside the “Act Model” field.

Size + Spring	<input checked="" type="checkbox"/> LPS-15A-255-LPS2-1	<input checked="" type="checkbox"/> LPS-15A-255-LPS3-1
Break to Open	1225	742
RunToOpen	555	101
End to Open	805	101
Break to Close	1149	1750
Run to Close	525	817
End to Close	771	1234

Actuator Type: LPS  
Service: Modulating  
Supply: Press. Temp.  
Unit: bar (q) °C  
Min: 4.14 -28.89  
Max: 13.00 100.00  
Yoke: Symmetrical

Act Config: Spring Return SA  
Fail Action: FC-FCW  
Air to: Open  
Shutoff Dp: 0.000 bar  
Act Model: LPS-15A-255B-FC2-1

MAWP: 12.00 bar (q)  
MOP: 12.00 bar (q)  
Act Volume: 9.2000 Liter

Size + Spring	<input checked="" type="checkbox"/> LPS-15A-255-LPS2-1	<input type="checkbox"/> LPS-15A-255-LPS3-1	<input type="checkbox"/> LPS-15A-255-LPS3-3	<input type="checkbox"/> LPS-15A-255-LPS3-4
Break to Open	1225	742	234	1733
RunToOpen	555	101	-754	842
End to Open	805	101	-754	1343
Break to Close	1149	1750	2479	1147
Run to Close	525	817	1150	524
End to Close	771	1234	1722	769

### LPS/LPC Product Release Contacts

For any further information or clarification related to LPS/LPC actuators, please contact:

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Chris Murphy - FCO Americas/Director - Commercial Operations - [cmurphy@flowserve.com](mailto:cmurphy@flowserve.com)



## ***Performance! Release***

### ***Product Enhancement: Logix 3400MD Foundation Fieldbus (FF) product changes***

- ❖ We have updated the Logix 3400MD in P!Nxt application to support ITK 6 as well as ITK 5 requirements.
- ❖ This update also requires some changes to the way the Hazardous Location certifications are called out in the model code to meet current standards.
- ❖ When the Foundation Fieldbus value is selected under the Positioner Communication attribute, ITK selection would be available instead of where we now use the Piezo Temperature attribute.
- ❖ When the HART value under Positioner Communication attribute is selected then the model code for Piezo Temperature range would remain 40.
- ❖ There will be two values under ITK option attribute. The default value would be ITK 6 and the second option would be ITK 5. It would change to model code to 50 for ITK 5 and 60 for ITK 6.
- ❖ Existing orders will be updated to conform to the new model code structure with ITK 5 as the standard. New orders should be entered as ITK6.
- ❖ Please do Valve update for getting newly added ITK option for old imported record.





## Performance! Release

### Product Enhancement: Oxygen Service option implemented for Mark One

As a first phase, Mark One valves are now capable of selecting oxygen compatible non-metals using the Oxygen Service pull-down attribute. The standard oxygen material option is designated by the suffix "(O2)". If BAM rated non-metal materials are required by the customer, the BAM selection should be used and the material options will show the suffix "(BAM)". This applies to the following attributes - Packing Material, Gaskets, P/B Seal Material, Soft Seat Material, Guide Upper & Guide Lower. Subsequent releases of PINxt may have more valves enabled with these options.

Oxygen service option is now selectable on sizing screen. See below:

The screenshot displays the Mark One valve sizing interface. The main table lists various process parameters such as Temperature, Upstream Pressure, Downstream Pressure, Liquid Flow Rate, Gas Flow Rate, Viscosity, Vapor Pressure, Pressure Drop, Choke Drop, Capacity, Estimated Travel, Valve Velocity, Pipe Velocity, and SPL. Below this table are actuator and service settings. On the right side, a configuration panel lists valve attributes including Valve Model, Valve Size, Pressure Rating, Body Style, Body Form, Flow Direction, Body Material, Special Class, End Connection, Trim Size, Characteristics, Plug Type, Retainer, and Bonnet/Cryo Type. The Oxygen Service dropdown menu is highlighted with a red box, showing options: NA, No, O2 Compatible Soft Goods, Yes, See Yes, BAM Required, and Bellows: None.

Based on selection of Oxygen service option on sizing screen, following 6 attributes display the O2 and BAM materials: Packing Material, Gaskets, P/B Seal Materials, Soft Seat Materials, Guide Upper & Guide Lower.

For example: If Oxygen service option selected is "No, O2 Compatible Soft Goods"

This close-up shows the Oxygen Service dropdown menu with the option "No, O2 Compatible Soft" selected. The dropdown is open, showing the selected item and other available options.



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Then the options under 6 attributes - Packing material, Gaskets, etc. - would show only O2 and BAM suffixed materials. Refer below screenshots:

Packing

Packing Type	SINGLE	TWIN	VACUUM	LIVE Loaded	FIRE Safe	O-RING
Safeguard (O2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lattygraf 6940 (O2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PTFE V-Ring (O2) v1	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Braided PTFE (O2) v1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lattygraf 6940 EF (O2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Latty 6940EF/3206SO (O2)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Safeguard (BAM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lattygraf 6940 (BAM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Braided PTFE (BAM) v1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PTFE V-Ring (BAM) v1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lattygraf 6940 EF (BAM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Latty 6940EF/3206SO (BAM)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Gaskets (Project :-Feed water control valve/ Tag :-T5)

Value	Price
PTFE (O2) v1	CF
PTFE (BAM) v1	CF
Glass Filled PTFE (O2) v1	CF
PTFE 3236 (BAM)	CF
Glass Filled PTFE (BAM) v1	CF
PCTFE (O2)	CF
Spiral Thermiculite, Inconel 625 (O2)	CF
Spiral Thermiculite, Inconel 625 (BA...	CF
Spiral Graphite SS (BAM) v1	CF
Spiral Graphite SS (O2) v1	CF
Spiral Graphite, Monel (O2) v1	CF
Spiral Graphite, Monel (BAM) v1	CF
Spiral Graphite, Inconel (BAM) v1	CF
Spiral Graphite, Inconel (O2) v1	CF
Teadit 911-OX SS (O2)	CF
Teadit 911-OX SS (BAM)	CF
Teadit 911-OX Monel (BAM)	CF
Teadit 911-OX Monel (O2)	CF
Teadit 911-OX Inconel (O2)	CF

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### Product Enhancement: Stem Material attribute added for Mark One valve

Users can now specify Stem Material and Plug Material separately.

Plug and stem materials for the Mark One will always default to the same material. For example, if the plug material is 316 SS, then the stem material will default to 316 SS.

35.2	0	P/B Seal Matl.	
36.1	0	Plug Material	316 SS
36.2	0	Plug Facing	
36.3	0	Stem Protector	
37.1	0	Stem Material	316 SS
37.2	0	Stem Facing	

For all trim sizes <5" the Mark One comes standard with a one-piece plug design; these smaller sizes will continue to have the same plug and stem material without an option to change.

Value	Price
316 SS	0

For rest trim size, all stem options will be available for selection as shown below:

Value	Price
316 SS	0
316 SS High-Temp	CF
316L SS	CF
304 SS	CF
304L SS	CF
410 SS Annealed	CF
410 SS HT	CF
17-4PH H1025	CF
17-4PH H1150M	CF
Duplex SS 22% Cr	CF
Duplex SS 25% Cr(<40)	CF
Duplex SS 25% Cr(>40)	CF
Allow 20	CF

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Plug & Stem materials will show list price only for the combinations where the plug and stem material are the same

	Value	Price
▶ 316 SS		0
316 SS High-Temp		CF
316L SS		CF
304 SS		CF
304L SS		CF
410 SS Annealed		CF
410 SS HT		CF
17-4PH H1025		CF
17-4PH H1150M		CF
Duplex SS 22% Cr		CF
Duplex SS 25% Cr(<40)		CF
Duplex SS 25% Cr(>40)		CF
Alloy 20		CF
Bronze, Aluminum		CF
Bronze; NI-AL		CF
Monel 400		CF
Monel K-500		CF
Hastelloy C; C-276		CF
Hastelloy C22		CF

The complete pricing (i.e. covering all valid combinations as per engineering) will be released gradually. The current changes will not impact price breakout sheets; they will be clean always for standard offerings. But the list price attached to individual plug material in the pick list, while users make the selection, will show pricing only if same stem material is selected and vice versa.

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## ***Performance! Release***

### ***Summary of resolutions covered under 7180 release***

#### **Related to Linear Product line**

21922: As a first phase, Mark One valves are now capable of using O<sub>2</sub> & BAM materials for following attributes - Packing Material, Gaskets, P/B Seal Material, Soft Seat Material, Guide Upper & Guide Lower. Users will see O<sub>2</sub> and BAM suffixed materials under mentioned attributes based on the selections of Oxygen Service attribute on sizing screen. Subsequent releases of P!Nxt may have more valves enabled with these options.

20541: Mark One valves are now enabled with selections for separate plug and stem material under the 'Specifications' window in P!Nxt. Engineering and pricing rules apply to each option.

22987: Site DeerPark (DPK) has been renamed as Pasadena QRC (PQR) and Site Pasadena (PAS) has been added to P!Nxt. Site PQR is set up with only short delivery options for both Valtek and Kammer valves whereas site PAS is set up with Kammer long delivery options.

24716: VL-ES Cylinder Actuator size 600ES has been removed from standard options. It is expected to be treated as a special requirement and quoted after engineering review.

24628: MarkOne with FlowAct selection rules are revised so that users would find this actuator always on Actuator type dropdown.

22667: A display issue of FL value for Multi-Z valves is resolved. Now FL value shown on Flow curve window would match the value on detailed printout.

24668: A display issue of actuator size for FlowAct actuator is resolved. Now actuator size printed on the spec sheet would match the calculated value on sizing window.

24645: For Valtek GS valves with Multistream retainer, 416 SS HT material has been removed from Plug and Seat material.

24664: A specific noise calculation problem for MegaStream retainer, when sized on German OS, is resolved.

23082: As per request, 030000 Kammer valve is now enabled for quotations under EQR site.

24537: A refresh issue of Bellows type for ColdFlow 341000 is resolved.



## ***Performance! Release***

23624: For Kammer actuators, "Other" option has been enabled now for tubing material.

23054: A display issue of yoke bore diameter for Kammer actuator sub is resolved. Now yoke bore diameter printed on the spec sheet would match the value displayed on specification window.

22760: A specific Pressure-Temperature violation display issue for Smallflow-385000 valve is resolved.

22206: A new attribute Severe Service Material is added for Valtek GS valve with necessary engineering & sizing rules.

24721: The default value of 'Positioner Action' attribute has been changed for Valtek GS valve with FlowAct actuator. The default has been changed from "3-Way single acting spool relay" to "3-Way single acting poppet".

24298: For ColdFlow-341000 valve, FlowAct actuator selection rule has been modified. Now FlowAct actuators will be available for all sizes  $\geq$  DN100 / 4"

23517: A display issue of stroke for Multi-Z valve is resolved. Now stroke printed on the spec sheet would match the stroke data for trim size selected on sizing window.

22808: A specific display issue of stroke for 197000 Kammer valve is resolved. Now stroke printed on the spec sheet would match the stroke data for trim size selected on sizing window.

22333: For SmallFlow-385000 valve, selection rules for 'Body Material', 'Body Style' and 'Body Form' has been modified as per request.

23496: For TotalFlow-335000 valve, selection rules specific to DIN standards has been modified as per request.

22378: For Mark One valve with Deep Cryo option, the default for 'Body Bolting Material' has been changed as per request. The default has been changed from "B8-8 (304 SS)" to "B8-8 Cl.2"

23474: Added value of "Pressure Containing Parts + Seat" to attribute CMTR for various linear valves as per request.



## ***Performance! Release***

24876: Resolved a specific scenario in P!Nxt application which would have otherwise caused it to crash while sizing FlowAct with MarkOne Valve.

### **Related to Rotary Product line**

23776: New Product 'LFPS Act Sub' has been added into P!Nxt. This will enable users to quote LPS & LPC actuator sub-assemblies.

24525: For LPS/LPC/LFPS Act Sub products, 'Air Supply' value has been added on the Actuator Detail Information.

24430: For LPS/LPC/LFPS Act Sub products, 'Actuator Volume', 'MAWP' and 'MOP' values have been added on Actuator UI and Actuator Detail printout.

24429: For LPS actuators, new Handwheel options have been added under 'Manual Override' attribute.

24498: For LPS/LPC actuators, a correction in model code display is done for Spring Return actuator on selection grid.

24499: For LPS/LPC actuators, an optimization algorithm has been implemented in P!Nxt. The application will now provide an optimum solution to users among LPS and LPC, based on valve torque requirements.

24634: For TMCBV valve, selection rule for 'Ball Material' based on pressure class has been modified as per request.

24662: For MaxFlo 4 valve, an error in trim cv display for Globe style body is resolved now.

23606: For MaxFlo 4 valve with Logix 420 positioner, the defaults for 'Positioner shaft' & 'Positioner Mounting' attributes have been corrected now as per request.

23623: The Pressure-Temperature rules have been implemented now for MaxFlo 4 valve.

24636: For Valdisk TX3 valve, selection rules for 'Disk Material', 'Seal Retainer Material' and 'Bottom Flange Bolting' has been modified for CF8M Body Material selection.

24387: A specific Pressure-Temperature violation display issue for Valdisk TX3 is resolved.



## ***Performance! Release***

24268: For Valdisk valve, “Double Flanged (Short Pattern)” is added on sizing screen so that user can make the selection there without going to the specification window.

23448: The High Cycle Soft Seat Cv data has been corrected for Valdisk valve

24546: For ShearStream valve, an issue in Shutoff class rule with PEEK seat is resolved.

24697: A display issue of spring size for VR-UHC actuator is resolved. Now spring size printed on the spec sheet would match the calculated value on sizing window.

### **Related to Accessories**

21569: Updated the Logix 3400MD in P!Nxt application to support ITK 6 as well as ITK 5 requirements.

24584: Various data updates have been done on all PMV products that convey necessary product information to users for selection.

24431: An issue related to ‘Remarks’ printed on Spec sheet for Solenoid is resolved now.

### ***Related to P!Nxt Application features***

21698: The number of process conditions under various parameters in “Report Builder” feature has been extended to 10 conditions. This will help users to generate reports for all the 10 conditions entered on sizing screen.

23865: For Springville site, which is the only site enabled with “Tag Module” feature currently, printing of Tag details even with valve quantity = 1 is implemented now.

24709: The 'Valve Update' feature has been disabled for any type of locked records. With this implementation only records with “Initial Status” would be eligible for Valve Updates.

24446: The serial numbers, associated with a tag, were not refreshing if the Quantity of valve was decreased. This refresh happened only if user opened the Quantity window in P!Nxt. This refresh issue is resolved now.

24448: When the fluid information for “Unknown Media” fluid was printed, the minimum and maximum temperature displayed were incorrect. This issue is resolved now.





## ***Performance! Release***

24361: While generating report for some parameters like System Noise, Sigma coefficients etc., some inconsistent units were displayed on the reports. This issue is resolved now.

24129: The printing logic for assembly routings, enabled in previous releases for only Springville site, has been made site independent now. This enables P!Nxt to print assembly routing for all sites now, based on the data available in associated tables.

**Thanks to all who contributed to this release.**

**Please continue to report all issues in our tracker:**  
<http://www.flowserveperformance.com/performtracker>

**Flowserve - Performance! Team**  
[performance@flowserve.com](mailto:performance@flowserve.com)

*Disclaimer: Flowserve's audit of Performance!Nxt Version 12.7180 determined that the resulting software output is consistent with industry standard calculations and Flowserve product design data. Flowserve welcomes reports of any error that might be discovered in the software and will promptly address each issue.*

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