



The National BIM Library

BIM Object Guide: Private packaged pumping stations



DELTA
membrane systems

Version 1.0

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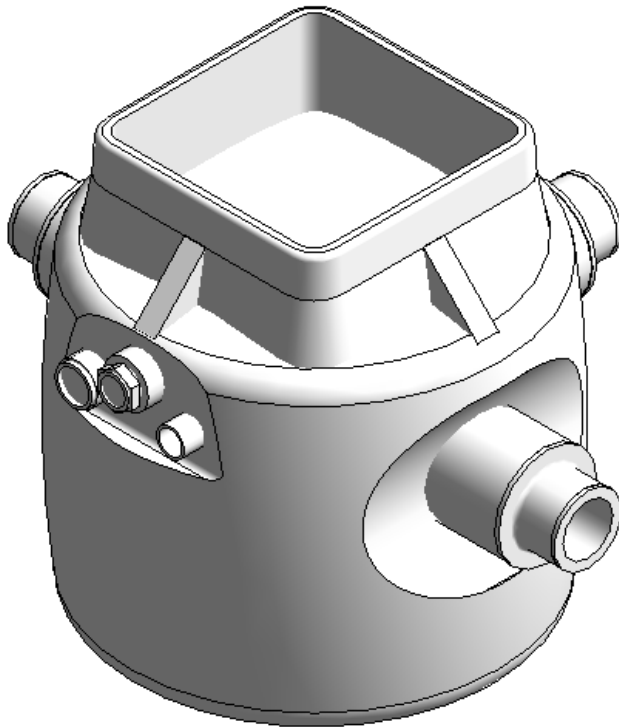
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1.0 Introduction

This guide covers the use of Private packaged pumping stations included within the National BIM Library.

Private packaged pumping stations



All systems listed below are included in the following file:

nbl_PrivtPckgePumpStion_DeltaMembranes

nbl_PrivatePackagedPumpingStations_DeltaMembranes_SingleV3PumpStation

nbl_PrivatePackagedPumpingStations_DeltaMembranes_DualV3Sump

nbl_PrivatePackagedPumpingStations_DeltaMembranes_FoulV3PumpStation

1.1 Naming

National BIM Library objects are named to identify their type and configuration. Fields are segregated using an under bar (_) and information within each field is segregated using hyphens (-). Fields are abbreviated to reduce characters and capitals used at the start of each abbreviation to aid readability.

File name and objects are named as below:

File name

Field1 *Author_***Field2** *Category_***Field3** *Manufacturer_***Field4** *Product Range*

Object

Field1 *Author_***Field2** *Category***Field3** *Manufacturer_***Field4** *Product_***Field5** *Differentiator*

2.0 Parameters

Parameters included in the Private packaged pumping stations BIM object are as follows:

2.1 National BIM Library Parameters

Author	The name of the BIM object's author.
BIMObjectName	Name of the BIM object as it will appear in software. Using NBL naming procedure.
Description	The full description of a product or system.
Help	URL of a website where additional help notes are available.
IssueDate	The issue date of this BIM object.
ManufacturerURL	URL of the product or system manufacturer.
NBSDescription	NBS Uniclass title.
NBSNote	Where a second system which is related to the BIM object can be described.
NBSReference	NBS Uniclass section/clause number.
NBSTypeID	A reference to the object for the user if one or more is used within the project.
Uniclass2	Uniclass2 code.
Version	The version number of the BIM object.

2.2 NBS Parameters

CollectionTankCapacity	Percentage of the product which is recycled. Relates to a British standard.
Inlet	Type of inlet connection used in pump.
Integral accessories	List the accessories used with pump.
Non-returnValve	State if a non-return valve is required within pump
Outlet	Type of outlet connection used in pump.
Pump	Type of pump
PumpImpellerType	Type of pump impeller used in pump
ThirdPartyCertification	Link provided which related to and Third Party Certificates related to the product.
Ventpipes	Type of vent pipe connection used in pump.

2.3 Manufacturers Parameters

FuseRatingSpur	A Fuse spur is an electrical terminology. It is denoted by a range of frequency through which any electrical circuit is operated. The Fuse spur rating is expressed in amps [A].
KWRating	A measurement of energy the product requires. Kilowatt rating expressed in [kW].
PumpModel	Model of the products code.
TypicalDuty	The rate of litres per second the product works to.

2.4 IFC Parameters

Note: IFC definitions have been obtained from BuildingSmart IFC2x3 website (<http://buildingsmart-tech.org>).

CasingMaterial	Primary material of the casing.
ImpellerMaterial	Primary material of impeller.
ImpellerSealMaterial	Primary material of impeller seal.
ConnectionSize	The connection size of the to and from the pump.
Current	The current that a device is designed to handle.
FlowResistanceRange	Allowable range of frictional resistance against which the fluid is being pumped.
FlowRateRange	Allowable range of volume of fluid being pumped against the resistance specified.
Frequency	The frequency that a device is designed to handle.
InsulationStandardClass	Insulation standard classes provides basic protection information against electric shock. Defines levels of insulation required in terms of constructional requirements (creepage and clearance distances) and electrical requirements (compliance with electric strength tests). Basic insulation is considered to be shorted under single fault conditions. The actual values required depend on the working voltage to which the insulation is subjected, as well as other factors. Also

	indicates whether the electrical device has a protective earth connection.
IP_Code	IEC 60529 (1989) Classification of degrees of protection provided by enclosures (IP Code).
HasProtectiveEarth	Indicates whether the electrical device has a protective earth connection (=TRUE) or not (= FALSE).
NetPositiveSuctionHead	Minimum liquid pressure at the pump inlet to prevent cavitation.
NominalRotationSpeed	Pump rotational speed under nominal conditions.
NumberOfPoles	The number of live lines that is intended to be handled by the device.
PhaseAngle	The angular difference between two waveforms of the same frequency.
PhaseReference	The phase identification used for the device electrical input. This should be the same phase identifier that is used for the conductor segment providing the electrical service to the device. In general, it is recommended that IEC recommendations for phase identification are used (L1, L2 etc.). However, other phase identifiers may be used such as by color (Red, Blue, Yellow) or by number (1, 2, 3) etc.
Power	The power that a device is designed to handle.
Reference	Reference ID for this specified type in this project (e.g. type A-1).
TemperatureRange	Allowable operational range of the fluid temperature.
Voltage	The voltage that a device is designed to handle

2.5 COBie Parameters

The following COBie parameters have been included within the Private packaged pumping stations BIM object and can be used to prepare COBie data schedules:

AccessibilityPerformance	Accessibility issue(s) which the product satisfies.
AssetIdentifier	The asset identifier assigned to an occurrence of a product (prior to handover).
BarCode	The identity of the bar code (or rfid) given to an occurrence of the product.
CodePerformance	Code Compliance requirement(s) which the product satisfies.
Colour	Characteristic or primary colour of product.
Constituents	Optional constituent features, parts or finishes.
Cost	Cost impact of replacement process.
Documentation	Location (Uniform Resource Information) for further product information.
DocumentReference	Location (Uniform Resource Information) for the source or updates to this product information.
Features	Features or other important characteristics relevant to product specification.
Finish	Finish selection for this object. Here specification of the surface finish for informational purposes.
Grade	Standard grading(s) to which the product corresponds.
InstallationDate	The date that the manufactured item was installed.
LifeCyclePhase	Life Cycle Phase as defined in ISO 15978.
Manufacturer	The organization that manufactured or assembled the item.
Material	The organization that manufactured or assembled the item.
MethodOfMeasurement	Method of measurement.

ModelLabel	The model number assigned by manufacturer.
ModelReference	The name used by the manufacturer.
NominalHeight	Nominal height of product, typically the vertical or secondary characteristic dimension.
NominalLength	Nominal length of product, typically the larger or primary horizontal dimension.
NominalWidth	Nominal width of product, typically the characteristic or secondary horizontal or characteristic dimension.
Process	Specification of process.
ProductionYear	The year of production for the manufactured item.
ReferenceStandard	Reference standard(s) to which the product is compliant.
ReplacementCost	An indicative cost for unit replacement.
SerialNumber	The serial number assigned to an occurrence of a product by the manufacturer.
ServiceLifeDuration	The length or duration of a service life.
ServiceLifeType	The typical service life that is quoted for an artefact under reference operating conditions.
Shape	Characteristic shape of product.
Size	Characteristic size of product.
SustainabilityPerformance	Sustainability issue(s) which the product satisfies.
TagNumber	The tag number assigned to an occurrence of a product.
WarrantyDescription	Description of the warranty.
WarrantyDurationLabour	Duration of labour warranty (years).
WarrantyDurationParts	Duration of parts warranty (years).
WarrantyGuarantorLabour	Organization acting as guarantor of labour warranty.
WarrantyGuarantorParts	Organization acting as guarantor of parts warranty.
WarrantyStartDate	The date on which the warranty commences.

3.0 Abbreviations

nbl	national BIM library
Pckge	Packaged
Privt	Private
Pump	Pumping
Stion	Stations