IMI NORGREN

VT series
Ball Valve for Rail Applications

Installation and Maintenance Instructions

EN

For further information, scan this QR code or visit www.imi-precision.com

TECHNICAL DATA

Fluid:	Compressed air
Working pressure:	10 bar (146 psig)
Maximum pressure:	12 bar (175 psig)
Storage temperature:	-55 °C to +85 °C (-67 ° to 185 °F)
Operating temperature*:	-40 °C to +85 °C (-40 ° to 185 °F)
	* Air supply must be dry enough to avoid ice formation at temperatures below +2 °C (+35 °F)
Materials:	Body, end connectors and handles: Aluminium
	Seat: PTFE
	'O'-rings: Synthetic Rubber
	Ball, Stem: Brass
	Screws: Steel

INSTALLATION

The ball valve must be connected to the system so it respects the direction of flow shown on the body of ball valve. The plugs must be removed before use.

Inline Mounted Valves

Use pipe thread sealant on male threads only. Do not allow sealant to enter interior of valve

Flange Mounted Valves

Attach valve to flange using screws + insert o-rings from attachment.

Disassembly

1. Shut off inlet pressure. Reduce pressure in inlet and outlet lines to zero.
2. Remove the valve from the air line. Disassemble in general accordance with item numbers on exploded view.

Cleaning

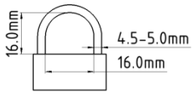
1. Clean all parts with warm water and soap.
2. Dry and inspect parts. Replace parts found to be damaged.

Assembly

1. Lubricate o-rings and seats (item 3, 4, 7, 30) with light coat suitable grease with temperature range -40°C to +85°C (the grease should be based on synthetic hydrocarbon oil and calcium soap).
2. Assemble the unit as shown on the exploded view. Ball (item 2) must be assembled so the drilled hole can be seen in the outlet when the handle is in the closed position.

Locking handle

Padlock with following recommended dimensions is to be used to lock the latching handle.



⚠ WARNINGS

These products are intended for general usage primarily for Rail sector. Do not use these products where pressures and temperatures can exceed those listed under Technical Data.

Before using these products with fluids other than air, consult IMI Precision Engineering.

The ball valve is meant to open/close working fluid supply, not for flow regulation. Electric monitoring provides information about actual working status just in end positions. This signal is for information only and should not be used as a safety signal. Before disassembling of device placed behind the valve, the operator needs to check the system is depressurized by separate pressure indicator (e.g. pressure switch), even the signal from monitoring shows closed position of the valve. The valve equipped by electrical monitoring needs to be grounded to ensure proper protection against electric shock. End user is responsible for correct grounding and wire protection against damage.

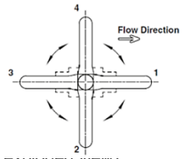
OPTION SELECTOR

VT ★ ★ - ★ ★ ★ - ★ 2 ★ ★

SERIES SIZE	Substitute
DN 15	20
DN 20	30
DN 25	40
DN 32	50
THREAD SIZE	**Substitute**
1/2" (DN 15)	4
3/4" (DN 20)	6
1" (DN 25)	8
1 1/4" (DN 32))	A
no thread (DN 15, DN 25) *1)	N
MONITORING OPTION	**Substitute**
NO MONITORING	1
OPEN POSITION	2
CLOSE POSITION	3
OPEN/OPEN POSITION	4
CLOSE/CLOSE POSTIION	5
OPEN/CLOSE POSITION	6
HANDLE POSITIONING	**Substitute**
1 OPEN; 2 CLOSE	0
1 CLOSE; 2 OPEN	1
3 OPEN; 4 CLOSE	2
4 CLOSE; 1 OPEN	3

Thread type	Substitute
PTF	A
ISO Rc	B
G THREAD	G
NO THREAD *1)	N
HANDLE	**Substitute**
NO HANDLE	N
LEVER HANDLE	
WHITE	H
BLACK	J
RED	K
YELLOW	L
LATCHING HANDLE	
WHITE	O
BLACK	P
RED	R
YELLOW	S
PORT AND LOCKING	**Substitute**
IN-LINE 3/2	
NO LOCK	F
LOCK CLOSED *2)	T
LOCK CLOSED AND OPEN *2)	H
IN-LINE 2/2	
NO LOCK	G
LOCK CLOSED *2)	B
LOCK CLOSED AND OPEN *2)	A
INTERFACE 3/2	
NO LOCK	D
LOCK CLOSED *2)	E
LOCK CLOSED AND OPEN *2)	C

*1) These options are valid for interface versions only
*2) Locking versions (T, H, B, A, E, C) are Available with latching handle only (O, P, R, S)



REPLACEMENT ITEM

Service kit (items circled on exploded view)

V T ★ ★ - K I T A ★

SERIES SIZE	Substitute
DN 15	20
DN 20	30
DN 25	40
DN 32	50

INTERFACE	Substitute
INLINE	T
INTERFACE	N

HANDLE KIT

V T ★ ★ - K I T ★ ★ ★ ★

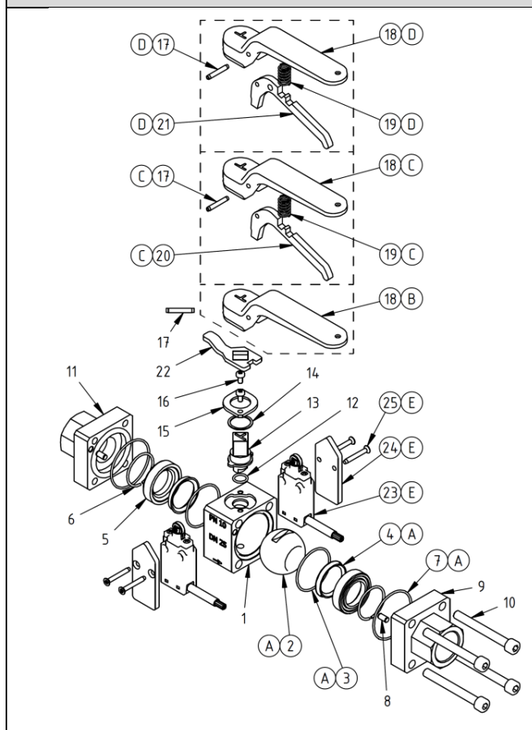
SERIES SIZE	Substitute
DN 15	20
DN 20	30
DN 25	40
DN 32	50
TYPE OF HANDLE	**Substitute**
LEVER HANDLE KIT	B
LATCHING HANDLE KIT	C
LATCHING HANDLE + LOCKING KIT	D

TYPE OF BALL VALVE	Substitute
INLINE WITH MONITORING	L
INTERFACE: INLINE W/O MONITORING	S
HANDLE POSITION	**Substitute**
1 OPEN; 2 CLOSE	A
1 CLOSE; 2 OPEN	B
3 OPEN; 4 CLOSE/4 CLOSE; 1 OPEN	C
HANDLE COLOUR	**Substitute**
WHITE	W
BLACK	B
RED	R
YELOW	Y

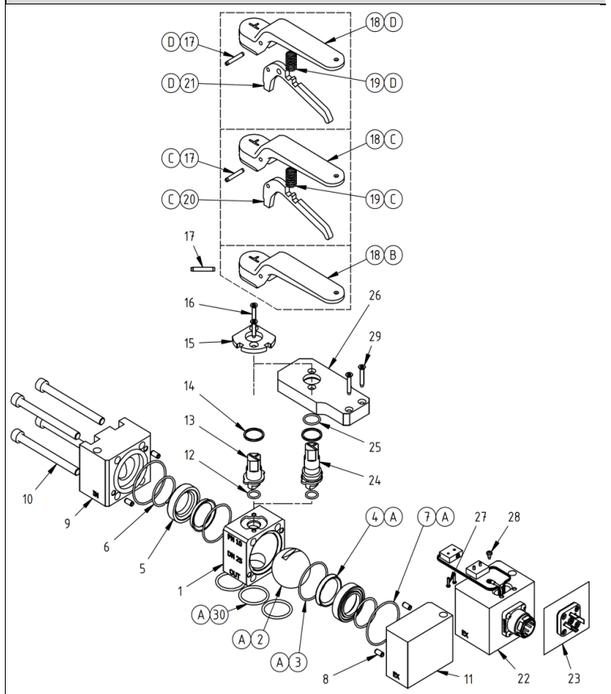
EXTERNAL SWITCH KIT

V T X X - K I T E

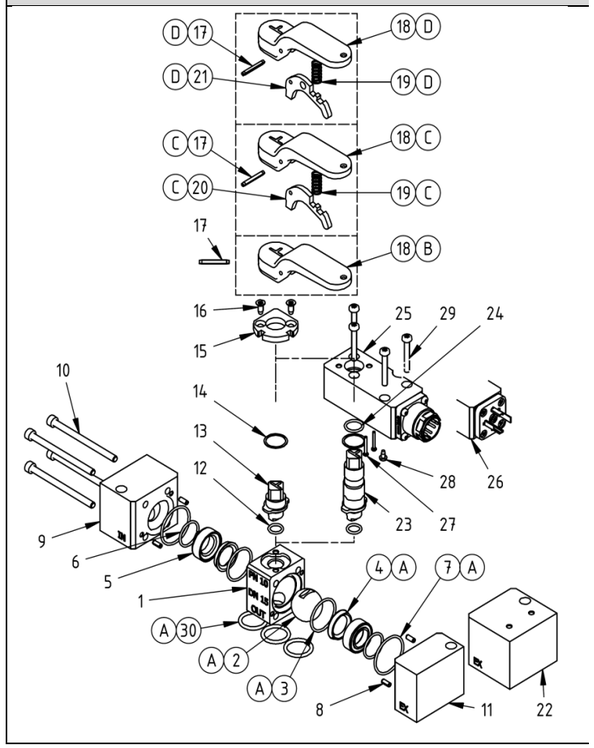
INLINE SERIES



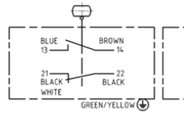
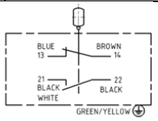
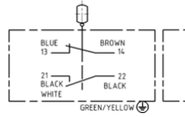
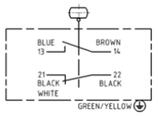
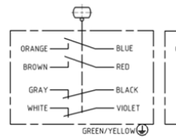
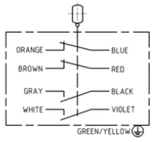
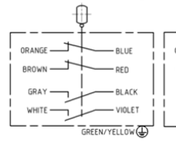
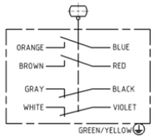
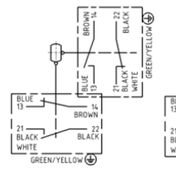
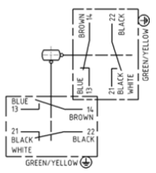
VT40 – INTERFACE VERSION



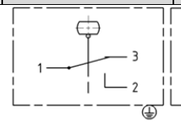
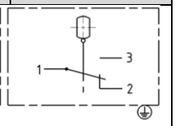
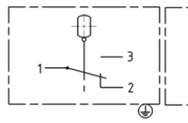
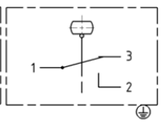
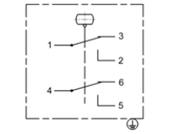
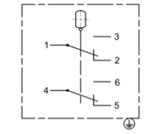
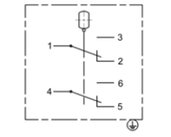
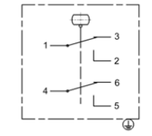
VT20 – INTERFACE VERSION



BALL VALVE POSITION - INLINE SERIES

MONITORING OPTION	CLOSED	OPEN
OPEN POSITION		
CLOSED POSITION		
OPEN/OPEN POSITION		
CLOSED/CLOSED POSITION		
OPEN/CLOSED POSITION		

BALL VALVE POSITION - INTERFACE SERIES

MONITORING OPTION	CLOSED	OPEN
OPEN POSITION		
CLOSED POSITION		
OPEN/OPEN POSITION		
CLOSED/CLOSED POSITION		
OPEN/CLOSED POSITION