

SVDPA - UNDER DISPENSER EMERGENCY SHUT OFF VALVE WITH DOUBLE POPPET - EX CERTIFIED



Please read carefully **BEFORE** commencing installation.

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PRODUCT DESCRIPTION AND OPERATION

This Emergency Shut Off Shear Valve is designed to be installed in pressurized fuel supply lines beneath fuel dispensers. If the fuel dispenser is pulled or knocked over the valve will break at its integral shear groove. The valve's double poppets will then automatically close to prevent release of fuel from either the fuel supply line or the dispenser pipe work. The check valve in the top part of the Shear Valve is equipped with a pressure relief valve that will open before the pressure inside the isolated dispenser reaches 2 Bar (30 PSI). In the event of fire a fusible link will break, closing the main valve poppet and therefore shutting off the fuel supply to the dispenser.

This product ATEX certified for use with category 1, 2 or 3 flammable liquids in accordance with European Regulation No. 1272/2008. It bears the following certification marking and number:

EN 13463-1, EN 13463-5, EN 13617-3

Cert No.: IEP 13 ATEX 0153

 **II ½ Gc**

IMPORTANT WARNING NOTES

1. This product must only be used WITH petrol, diesel or other liquids classed as category 1, 2 or 3 in accordance with European Reg. No.1272/2008.
2. Installation of this equipment and its associated tank, pipe work and fittings must only be carried out by qualified fuel installation engineers.
3. The installation must be carried out in accordance with the requirements of EN 13463-1, EN 13463-5, EN 13617-3 and the latest relevant local authority regulations and standards.
4. We will accept no warranty claims or liability if it is used for other liquids or applications.
5. This device must not be re-used or re-connected after separation.

INSTALLATION

NB: This Emergency Shut Off Shear Valve must be installed in accordance with the following instructions to ensure its correct operation.

1. Connect the fuel supply pipe work to the valve inlet (1 ½" BSP female) and the dispenser inlet pipe work to the valve outlet (1 ½" BSP female). Seal the threads with a suitable thread-sealing compound.

NB: When tightening threaded pipes into the valve ensure that no force is applied to the shear section.

2. Anchor the valve body securely to a structural member within the dispenser island using either the u-bolt or the 3-point boss mounting system provided.

NB: The anchoring system employed must be able to withstand a force in excess of 880 Nm (650 ftlb) to ensure breakage at the shear section in the event of an impact. The valve must be positioned so that its shear section is level with the base of the fuel dispenser +/- 12 mm (1/2").

The valve must be installed in such a way that the movement of the fulcrum arm is not impeded in any way when the valve operates.

SERVICING To be carried out every 12 months:

1. Shut off the power to the fuel dispenser and ensure there is no pressure within the pipe work system.
2. Check the valve for any signs of damage or leakage.
3. Close the valve manually by pushing down the latch to release the fulcrum arm. Ensure the main valve poppet closes correctly. Using the fulcrum arm open and close the main valve poppet several times to dislodge any foreign material which may have accumulated inside the valve.
NB: If the valve is damaged, leaking or fails to operate it must be replaced.
4. Reset the valve by rotating the fulcrum arm anti-clockwise and re-engaging the latch.

PRESSURE TESTING THE SUPPLY PIPEWORK SYSTEM

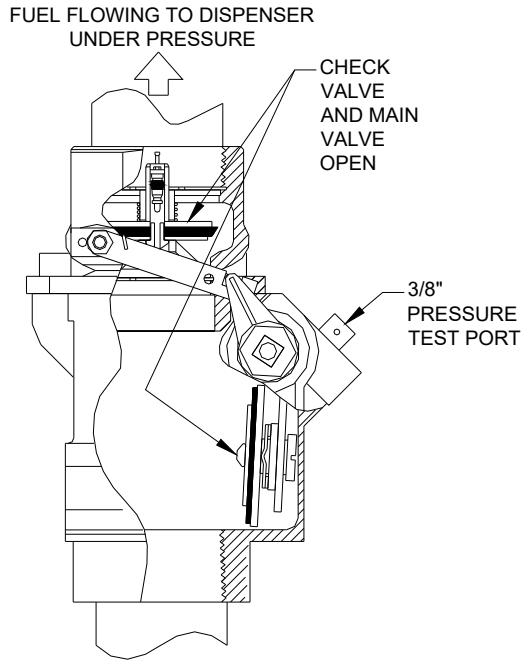
1. A 3/8" BSP test port is provided in the side of the valve to pressurize the pipe work system.
Warning: The fuel storage tank and dispenser must be isolated prior to pressurizing the pipe work system.
The test pressure must not exceed 3.5 Bar (50 PSI).

DAMAGE DUE TO IMPACT, COLLISION OR FIRE

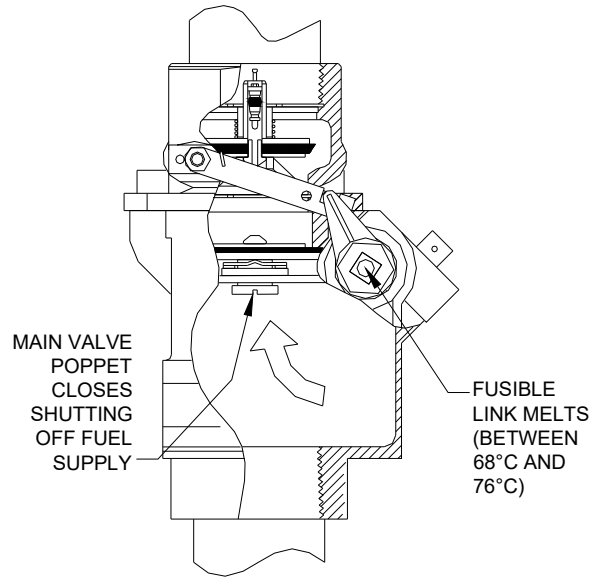
1. If the fuel dispenser has suffered an impact or collision thoroughly inspect the entire valve for any damage. If a shear has taken place and the main valve body is undamaged it will only be necessary to replace the valve's top housing.
2. Thoroughly test the valve, as detailed in the servicing instructions above, to ensure its correct operation.
NB: If there is any doubt as to the valve's ability to operate correctly it must be replaced.
3. If the valve has been exposed to a fire it must be replaced.

OPERATIONAL INFORMATION

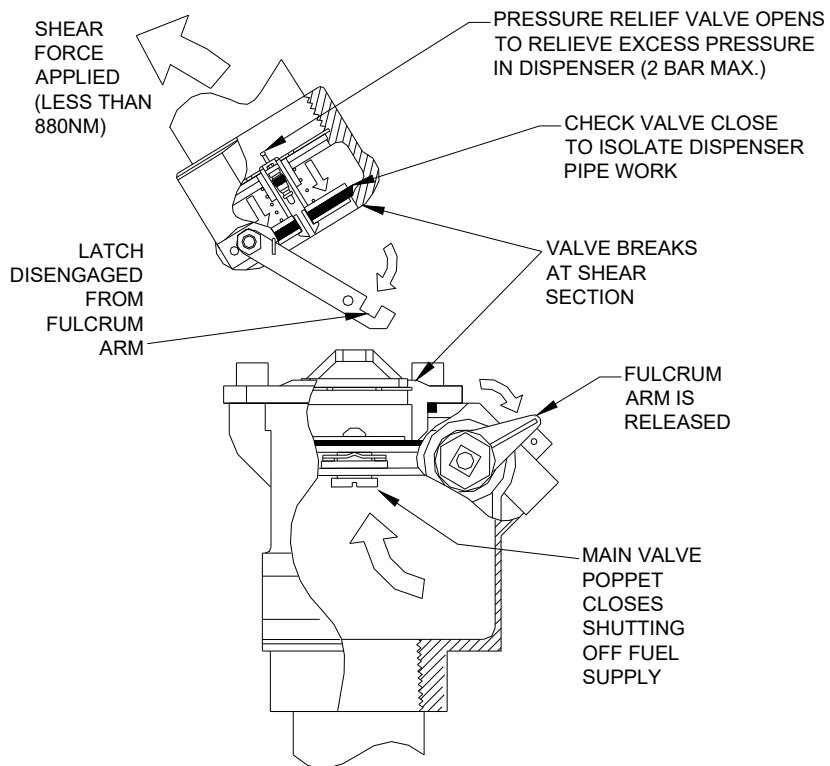
IN NORMAL USE



IN THE EVENT OF FIRE

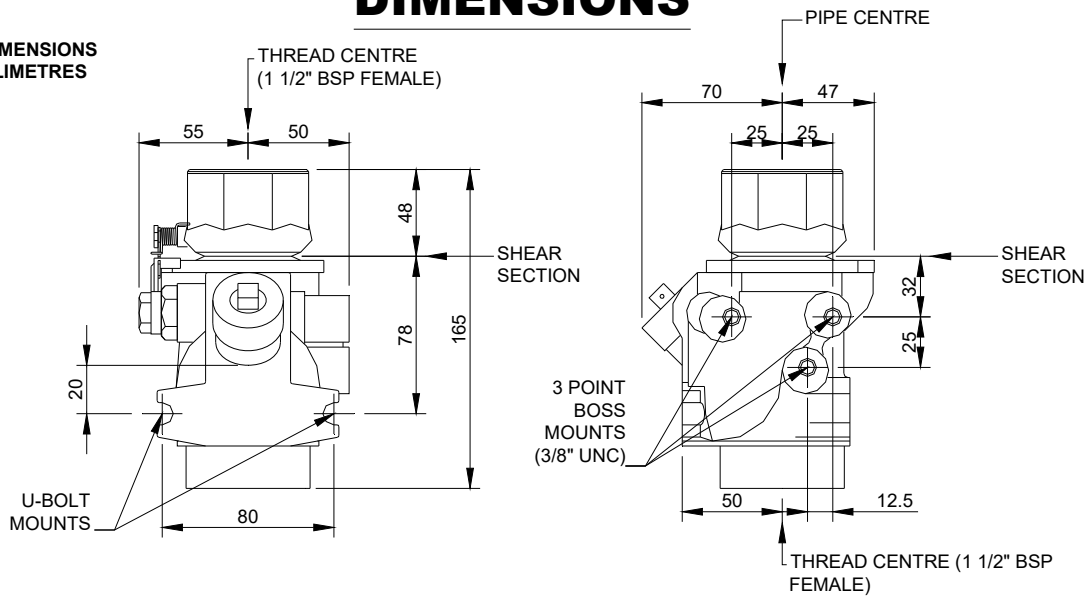


IN THE EVENT OF THE DISPENSER BEING KNOCKED/PULLED OVER

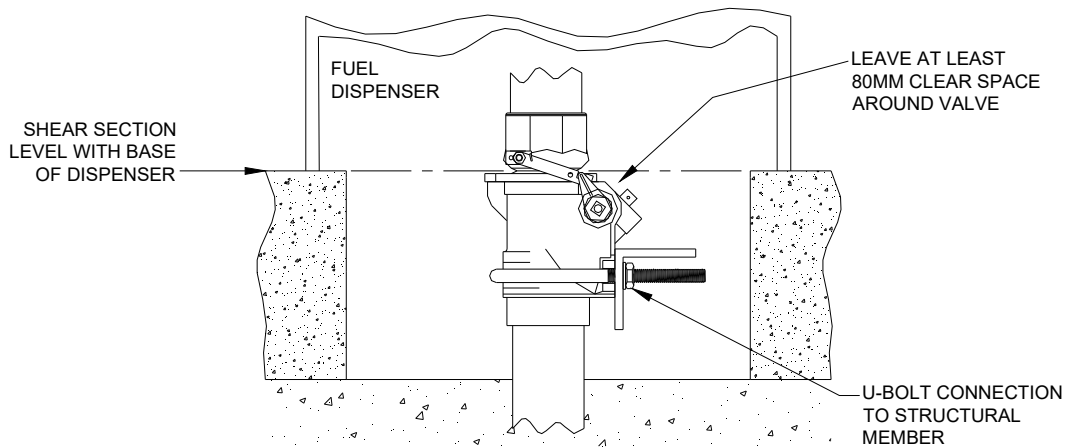


DIMENSIONS

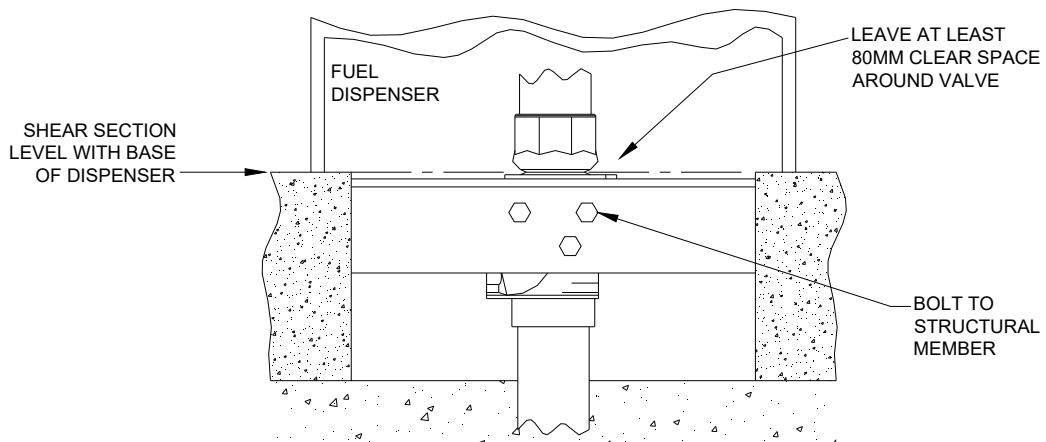
ALL DIMENSIONS
IN MILLIMETRES



INSTALLATION - "U" BOLT MOUNT



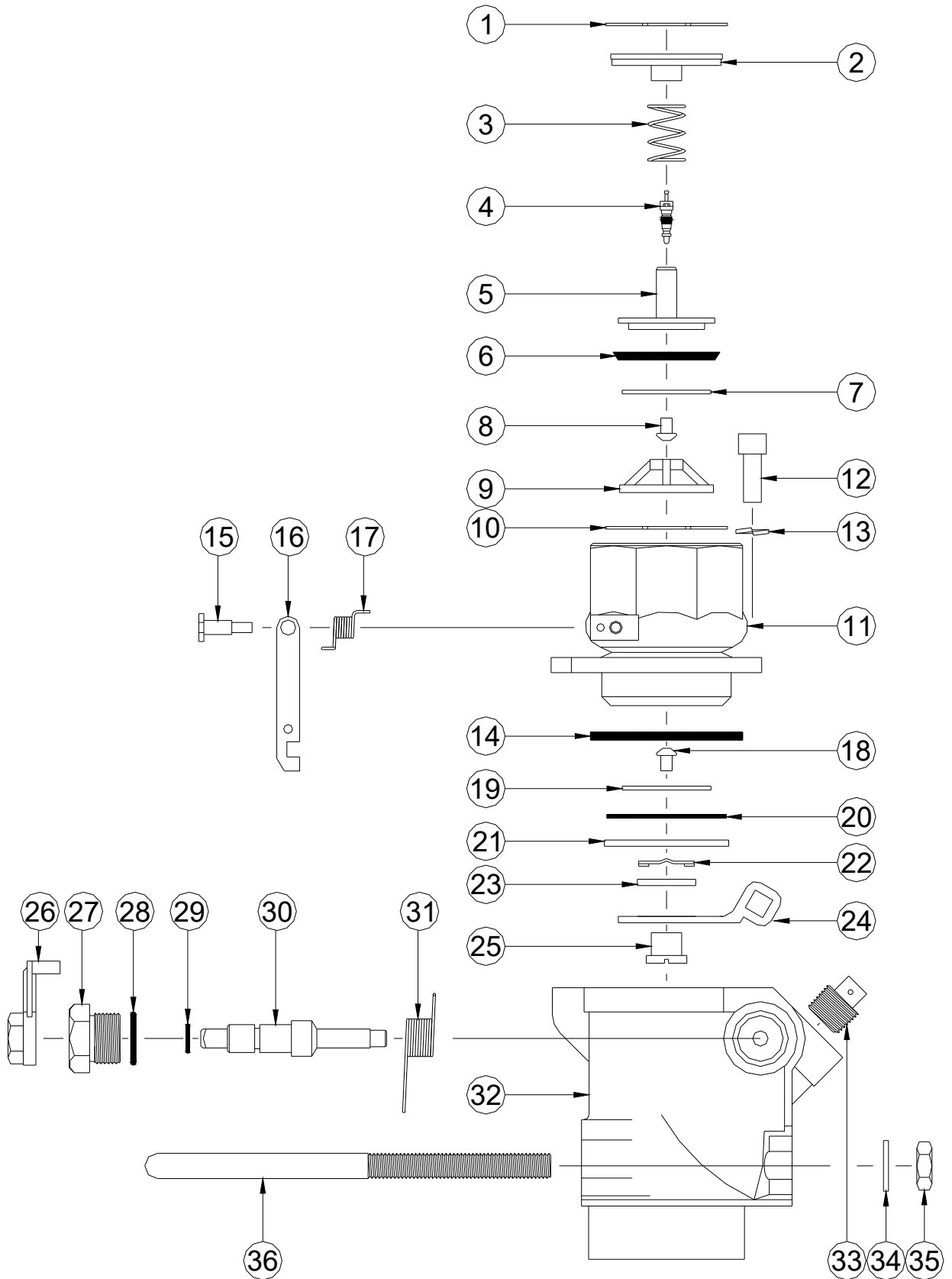
INSTALLATION - 3 POINT BOSS MOUNT



SVDPA PARTS LIST

DRG. REF.	PART DESCRIPTION	MATERIAL
1	Circlip	Spring Steel
2	Check Valve Spring Retainer	Die Cast Aluminium
3	Check Valve Spring	Spring Steel
4	Pressure Relief Valve	Stainless Steel
5	Check Valve Poppet	Brass
6	Check Valve Seal	High Nitrile Rubber
7	Check Valve Seal Washer	Zinc Plated Steel
8	Check Valve Screw	Zinc Plated Steel
9	Check Valve Brace	Nylon
10	Circlip	Spring Steel
11	Top Housing	Cast Iron
12	Housing Bolt (X3)	Hardened Steel
13	Housing Washer (X3)	Spring Steel
14	Housing Seal	High Nitrile Rubber
15	Latch Screw	Brass
16	Latch	Brass
17	Latch Spring	Spring Steel
18	Main Valve Screw	Zinc Plated Steel
19	Main Valve Seal Washer	Zinc Plated Steel
20	Main Valve Seal	High Nitrile Rubber
21	Main Valve Seal Holder	Zinc Plated Steel
22	Main Valve Spacer	Zinc Plated Steel
23	Main Valve Washer	Zinc Plated Steel
24	Main Valve Carrier	Zinc Plated Steel
25	Main Valve Stem	Aluminium
26	Fulcrum Arm With Fusible Link	Die Cast Aluminium
27	Packing Nut	Chrome Plated Brass
28	Packing Nut O-Ring	High Nitrile Rubber
29	Main Valve Shaft O-Ring	High Nitrile Rubber
30	Main Valve Shaft	Chrome Plated Brass
31	Main Valve Spring	Spring Steel
32	Body	Cast Iron
33	Test Port Plug	Cast Iron
34	U-Bolt Washer (x2)	Zinc Plated Steel
35	U-Bolt Nut (x2)	Zinc Plated Steel
36	U-Bolt	Zinc Plated Steel

SVDPA EXPLODED VIEW



SVDPA TEST DETAILS

TEST DESCRIPTION	PRODUCT TEST REQUIREMENTS		
	Routine Test (Every Valve)	Production Acceptance Test (Every 200th Valve)	Type Test (One Valve Only)
Valve Housing Air Pressure Integrity Test (5.25 Bar)	✓		
Air Pressure Test With Main Valve Closed (5.25 Bar)	✓		
Air Pressure Test With Check Valve Closed (2 Bar)		✓	
Pressure Relief Valve Opening Pressure Test (Below 2 Bar)		✓	
Thermal Link Temperature Resistance Test (Up To 68 Deg C)		✓	✓
Thermal Link Breaking Temperature Test (Between 68 and 76 Deg C)		✓	✓
Breaking Force Test (Below 880 Nm) With Closed Valve Press. Test (3.5 Bar)		✓	✓
Breaking Force Test (Below 880 Nm) With Closed Valve Press. Test (3.5 Bar)		✓	✓
Valve Housing Hydraulic Pressure Integrity Test (14 Bar)			✓
Hydraulic Pressure Test With Main Valve Closed (14 Bar)			✓
Hydraulic Pressure Test With Check Valve Closed (14 Bar)			✓
Pressure Relief Valve Opening Hydraulic Pressure Test (Below 2 Bar)			✓
Component Fuel Compatabilty Test (Petrol & Diesel)			✓

DECLARATION OF CONFORMITY

Company Name: **Hytek (GB) Ltd**

Address: **Delta House
Green Street
Elsenham,
Bishop's Stortford
Hertfordshire,
CM22 6DS**

Date of Issue: **25th October 2022**

Equip. Dets: **Under Dispenser Emergency Shut Off Valve With Double Poppet - SVDPA**


Appl. Directives:
& Standards **SI 2008 1597 Supply of Machinery Safety Regulations
SI 2016 1105 Pressure Equipment Safety Regulations**

94/9/EC (2014/34/EU) ATEX Directive

Aile part number:- QDYH

EN 13463-1, EN 13463-5, EN 13617-3

Cert No.: IEP 13 ATEX 0153

 II ½ Gc

Notified Body:- **IEP Uluslararası Enerji Petrol Gozetim, Sertifikasyon ve
Teknik Hizmetler Organizasyonu, Ticaret Limited Şirketi,
MTK Sitesi 2.Giriş 5746/1 Sokak. No:9 Kat: 2, Çamdibi
35090 IZMIR/TURKİY**

Declaration No: **UK064 Issue 4**

On behalf of the above-named company, I declare under our sole responsibility that, on the date the equipment accompanied by this declaration is placed on the market, the equipment conforms with all technical and regulatory requirements of the above listed directives.

Clive Wellings

Clive Wellings, Process Co-ordinator
25TH October 2022,
Bishop's Stortford, Herts