

Technical Specification

Control Point	Head (m)	Flow (l/s)
Primary Design	1.450	5.100
Flush-Flo™	0.438	5.074
Kick-Flo®	0.889	4.060
Mean Flow	4.465	

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Hydro-Brake® Optimum Flow Control including:

- 3 mm grade 304L stainless steel
- Integral stainless steel pivoting by-pass door allowing clear line of sight through to outlet. On stainless steel operating rope
- Beed blasted finish to maximise corrosion resistance
- Stainless steel fixings
- Rubber gasket to seal outlet
- Indicative Weight: 20 kg

POSITION & DIRECTION OF INLET PIPE(S) WILL BE SPECIFIED ON THE CONTRACT DRAWINGS

HYDRO-BRAKE OPTIMUM™ FLOW CONTROL, FITTED WITH PIVOTING BY-PASS DOOR

150 I.D. OUTLET (MINIMUM)

100mm MIN. FOR FERRULE

BENCHING

HYDRO-BRAKE OPTIMUM™ FLOW CONTROL, FITTED WITH PIVOTING BY-PASS DOOR

100mm MIN. FOR FERRULE

BENCHING

SECTION A-A

SECTION B-B

IMPORTANT:

THE LIMIT OF HYDRO INTERNATIONAL SUPPLY FOR SITE SPECIFIC DETAILS AND MINIMUM CHAMBER SIZE REFER TO HYDRO INTERNATIONAL. ALL CIVIL AND INSTALLATION WORK BY OTHERS. * WHERE SUPPLIED HYDRO-BRAKE OPTIMUM FLOW CONTROL & HYDRO-BRAKE OPTIMUM FLOW CONTROL ARE REGISTERED TRADEMARKS FOR FLOW CONTROLS DESIGNED AND MANUFACTURED EXCLUSIVELY BY HYDRO INTERNATIONAL.

THIS DESIGN LAYOUT IS FOR ILLUSTRATIVE PURPOSES ONLY. NOT TO SCALE.

DESIGN ADVICE

The headflow characteristics of this SHE-0100-5100-1450-5100 Hydro-Brake® Optimum Flow Control are unique. Dynamic hydraulic modelling evaluates the full headflow characteristic curve. The use of any other flow control will invalidate any design based on this data and could constitute a flood risk.

DATE

01/11/2023 09:36

SITE

Dinting Vale - Glossop

DESIGNER

Nicholas Richards

REF

WAI25 - S32HB

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Hydro International Ltd

Hydro-Brake® Optimum

MANHOLE REF

COVER LEVEL

INVERT LEVEL

OUTGOING PIPE DIAMETER

DEPTH TO SOFFIT

DEPTH TO INVERT

MANHOLE TYPE

CHAMBER DIAMETER

OPENING SIZE

COVER & FRAME

ACCESS TYPE

MANHOLE CO-ORDINATES

S32 Hydro-Brake Chamber

150.500m AOD

148.132m AOD

150mm

1.618m

2.368m

HYDROBRAKE

2400mm

1200mm x 675mm

1200mm x 675mm

x150mm deep

Double Step Irons

X = 401920.739E

Y = 394073.255N

HYDRO-BRAKE OPTIMUM™ WITH PIVOTING BY-PASS DOOR OR SIMILAR APPROVED

Technical Specification Criteria

BBA Approved	Head (m)	Flow (L/s)
Design Point	1.450	5.10
PRODUCT ID CODE	SHE-0100-5100-1450-5100	

NOTE
DETAILS ON THIS DRAWING ARE SUBJECT
TECHNICAL APPROVALS

NOTES

- These 1:20 Manhole Construction Details are for construction purposes ONLY when approval has been obtained from the Statutory Undertaker.
- The co-ordinates indicated on these 1:20 Manhole Construction Details relate to the proposed centre of the manhole and not to the pipe intersection; please refer to the Manhole Schedules should this information be required. Please note that the Manhole Schedules are for guidance and information purposes only and NOT to be used for pricing, ordering or construction.
- Should any discrepancies be identified between the 1:20 Manholes Construction Details and the Manhole Schedules these should be reported to both the Developer's Engineer and Betts Associates prior to any construction taking place.
- Should any discrepancies be identified between the Main Drainage Layout and the Domestic Drainage Layout these should be reported to both the Developer's Engineer and Betts Associates prior to any construction taking place.
- All manholes and main drainage to be constructed in accordance with the Standard 'Design and Construction Guidance - Appendix C' details
- All 1350mm Ø chamber rings to be 'Kitemarked'
- Concrete surround is required to manhole chamber rings unless otherwise proved
- All manhole lateral connections are to be made at soffit level to the main channel
- All adoptable manholes to have a class D400 cover.
- Ladders are to comply with Design and Construction Guide Clause E2.37.
- Rocker pipes are required at all inlet and outlet pipes to adoptable manholes, for rocker pipe length's refer to DCG Table E13

P01	03.11.23	Issued for initial comments	NR
Mark	Date	Details	By

Revision history

Drawing originator:

Client:

Project title:

Dinting Vale
Glossop

Drawing title:

1:20 Manhole Detail
S32HB Hydrobrake Detail

Scale: 1:20 for the original size of A1

Drawn by: NR Checked by: Passed by: Date: Nov' 23

Drawing status:

For Approval

Job No:	Drawing No:	Project	Origin	Volume	Level	Type	Discp.	Number	Revision:
WAI25	XX	BET	XX	XX	DR	C	1054	P01	

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