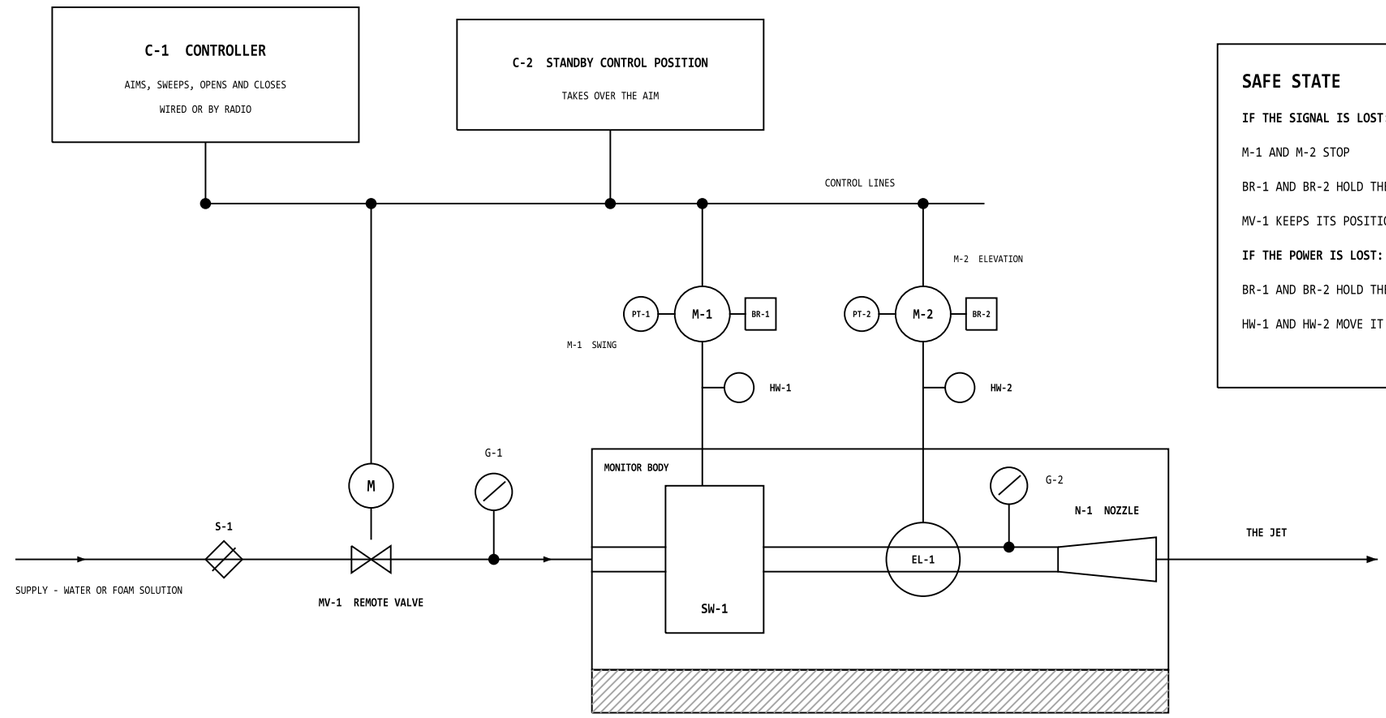
REMOTE-CONTROLLED FIRE MONITOR - REFERENCE SYSTEM SCHEMATIC

NOT TO SCALE - TAGS ONLY, NO PROCESS VALUES

SYSTEM SCHEMATIC - FROM THE SUPPLY TO THE NOZZLE, AND THE CONTROL OF THE AIM



SAFE STATE

IF THE SIGNAL IS LOST:

M-1 AND M-2 STOP

BR-1 AND BR-2 HOLD THE BARREL

MV-1 KEEPS ITS POSITION

IF THE POWER IS LOST:

BR-1 AND BR-2 HOLD THE BARREL

HW-1 AND HW-2 MOVE IT BY HAND

PT-1 AND PT-2 TELL C-1 WHERE THE BARREL POINTS
G-2 READS THE PRESSURE AT THE NOZZLE
THE PUSH OF THE JET GOES DOWN INTO THE MOUNT

NOTES

1. REFERENCE SYSTEM SCHEMATIC OF A REMOTE-CONTROLLED FIRE MONITOR, DRAWN IN THE STYLE OF THE GRAPHICAL SYMBOLS OF FLUID POWER. TAGS ONLY: NO FLOW, PRESSURE, FORCE, DISTANCE, SIZE, TIME OR QUANTITY VALUE IS GIVEN.
2. THE SUPPLY OF WATER OR FOAM SOLUTION PASSES THE STRAINER S-1 AND THE REMOTE VALVE MV-1 TO THE MONITOR BODY. G-1 READS THE PRESSURE AT THE INLET AND G-2 READS IT AT THE NOZZLE N-1.
3. THE BODY HAS A SWIVEL SW-1 AND A BARREL WITH AN ELEVATION JOINT EL-1. THE WHOLE MONITOR STANDS ON A MOUNT OR BASE THAT CARRIES THE PUSH OF THE JET IN SHEAR AND IN BENDING.
4. C-1 IS THE CONTROLLER, WIRED OR BY RADIO. C-2 IS A SECOND CONTROL POSITION THAT CAN TAKE OVER THE AIM. THE CONTROL LINES GO TO MV-1 AND TO THE TWO DRIVES.
5. M-1 SWINGS THE BODY AND M-2 RAISES THE BARREL. EACH DRIVE HAS A BRAKE (BR-1, BR-2) THAT HOLDS THE AIM, A POSITION SENSOR (PT-1, PT-2) AND A HANDWHEEL (HW-1, HW-2) FOR MANUAL OVERRIDE.
6. THE SAFE STATE IS DEFINED AT DESIGN AND TRIED BEFORE HANDOVER BY CUTTING THE SIGNAL AND THE POWER ON PURPOSE. LINES THAT CROSS ARE NOT CONNECTED. A DOT SHOWS A CONNECTION.
7. THE ARRANGEMENT OF THE MONITOR AND THE DETAILS ARE ON SHEET 002. CATALOGUE ITEMS ARE BOUGHT IN.

LEGEND

- FLUID LINE
- CONTROL LINE
- STRAINER
- REMOTE VALVE
- MOTOR
- BRAKE
- POSITION SENSOR
- HANDWHEEL
- PRESSURE GAUGE
- NOZZLE
- MOUNT
- CONNECTION

WHAT EACH STEP DOES

STEP	WHAT HAPPENS
1 OPEN	C-1 OPENS MV-1 AT A CONTROLLED RATE
2 AIM	M-1 AND M-2 MOVE THE BARREL; PT-1, PT-2 REPORT IT
3 HOLD	BR-1 AND BR-2 HOLD THE AIM AGAINST THE JET
4 THROW	THE PUSH GOES THROUGH THE BODY INTO THE MOUNT
5 CLOSE	C-1 CLOSES MV-1 AT A CONTROLLED RATE

REFERENCE CONFIGURATION - NOT FOR CONSTRUCTION

NEOMETRIX DEFENCE LIMITED
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REMOTE-CONTROLLED FIRE MONITOR - REFERENCE CONFIGURATION

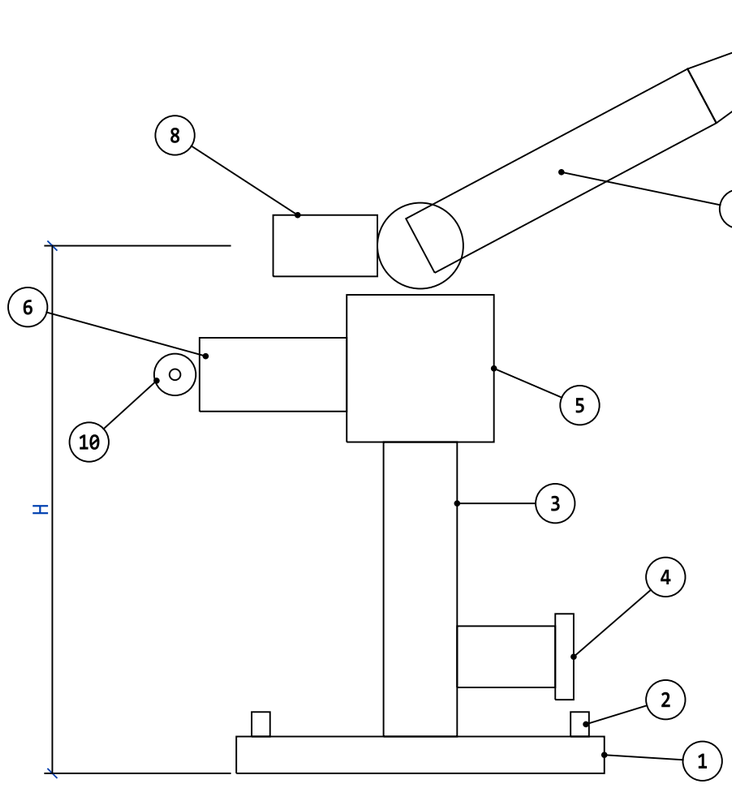
SYSTEM SCHEMATIC

SUPPLY, MONITOR BODY, DRIVES, CONTROLLER AND SAFE STATE

DWG NO	SCALE @ A3	SHEET	REV
NMX-RFM-97-001	NTS	1 OF 2	A
DATE	UNITS	DRAWN	STATUS
12-11-2026	TAGS ONLY	NMX-DO	REFERENCE

ELEVATION - FIXED PEDESTAL MONITOR

NOT TO SCALE

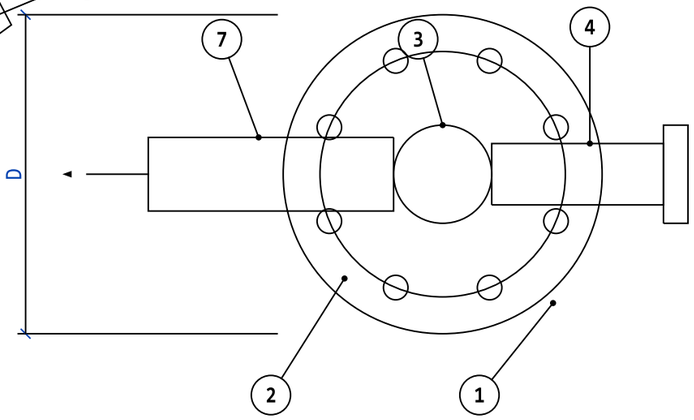


THE PEDESTAL IS BOLTED DOWN THROUGH ITS BASE FLANGE

H IS THE HEIGHT OF THE PIVOT ABOVE THE FLANGE; W IS THE WIDTH OF THE FLANGE

PLAN - FLANGE, BOLT CIRCLE AND BARREL

NOT TO SCALE



EIGHT BOLTS ON ONE BOLT CIRCLE HOLD THE FLANGE DOWN

THE INLET BRANCH TAKES THE SUPPLY

D IS THE DIAMETER OF THE BASE FLANGE

NOTES

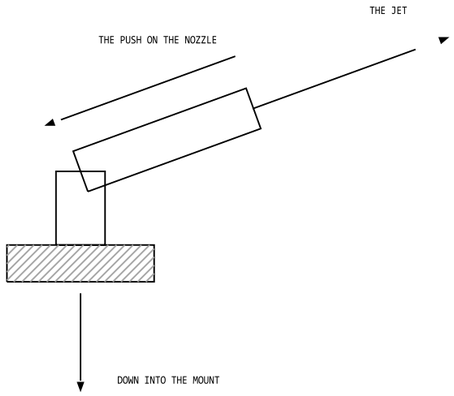
1. REFERENCE ARRANGEMENT OF A FIXED PEDESTAL REMOTE-CONTROLLED FIRE MONITOR. LETTERS ARE DIMENSIONS SET BY DESIGN: NO FLOW, PRESSURE, FORCE, DISTANCE OR QUANTITY VALUE IS GIVEN.
2. THE ELEVATION SHOWS THE BASE FLANGE WITH ITS BOLTS, THE PEDESTAL PIPE, THE INLET BRANCH, THE SWIVEL HOUSING WITH ITS DRIVE, THE RAISED BARREL WITH ITS DRIVE AND THE NOZZLE. H IS THE HEIGHT OF THE PIVOT; W IS THE WIDTH OF THE FLANGE.
3. THE PLAN SHOWS THE FLANGE, ITS BOLT CIRCLE OF EIGHT BOLTS, THE PEDESTAL, THE INLET BRANCH AND THE DIRECTION OF THE BARREL. D IS THE DIAMETER OF THE FLANGE.
4. DETAIL A: THE JET PUSHES THE NOZZLE BACK AS HARD AS IT PUSHES THE WATER OUT. THE PUSH GOES DOWN THROUGH THE BARREL AND THE PEDESTAL INTO THE MOUNT, WHICH MUST RESIST IT IN SHEAR AND IN BENDING.
5. DETAIL B: THE FLATTER THE JET, THE MORE OF THE PUSH IS SIDEWAYS. A STEEP JET PUSHES MOSTLY DOWN, WHICH THE MOUNT CARRIES, AND A FLAT JET PUSHES MOSTLY SIDEWAYS.
6. DETAIL C: A MOVABLE BASE IS WEIGHTED AND BRACED OR ANCHORED BEFORE THE JET IS THROWN. A BASE THAT IS NOT BRACED CAN SLIDE UNDER A SIDEWAYS PUSH, OR TIP.
7. THE SYSTEM SCHEMATIC IS ON SHEET 001. THE MOUNTING INSTRUCTIONS FOR THE MONITOR BODY THAT IS FITTED GOVERN HOW IT IS HELD DOWN. CATALOGUE ITEMS ARE BOUGHT IN.

ITEMS

ITEM	DESCRIPTION
1	BASE FLANGE
2	BOLT
3	PEDESTAL PIPE
4	INLET BRANCH
5	SWIVEL HOUSING
6	AZIMUTH DRIVE
7	BARREL
8	ELEVATION DRIVE
9	NOZZLE
10	HANDWHEEL

DETAIL A - THE JET PUSHES BACK

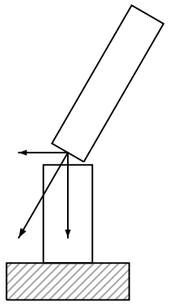
NOT TO SCALE



THE JET PUSHES THE NOZZLE BACK AS HARD AS IT PUSHES THE WATER OUT

DETAIL B - A FLAT JET PUSHES SIDEWAYS

NOT TO SCALE



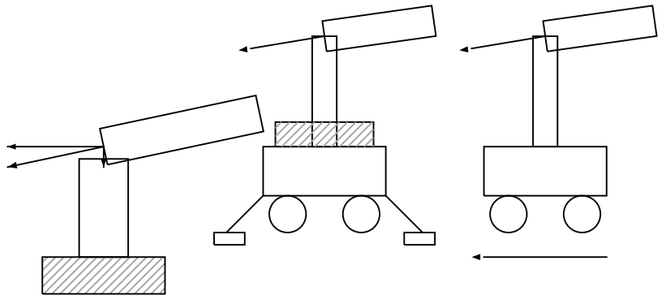
A STEEP JET

STEEP: MOST OF THE PUSH GOES DOWN

FLAT: MOST OF THE PUSH IS SIDEWAYS

DETAIL C - A MOVABLE BASE

NOT TO SCALE



A FLAT JET

BRACED AND WEIGHTED: IT HOLDS

NOT BRACED: A SIDEWAYS PUSH SLIDES IT

REFERENCE CONFIGURATION - NOT FOR CONSTRUCTION

NEOMETRIX DEFENCE LIMITED

ENGINEERED IN NOIDA - INDIA

REMOTE-CONTROLLED FIRE MONITOR - REFERENCE CONFIGURATION

GENERAL ARRANGEMENT AND DETAILS

FIXED MONITOR, ITS MOUNT, AND THE THREE DETAILS

DWG NO	SCALE @ A3	SHEET	REV
NMX-RFM-97-002	NTS	2 OF 2	A
DATE	UNITS	DRAWN	STATUS
12-11-2026	TAGS ONLY	NMX-DO	REFERENCE