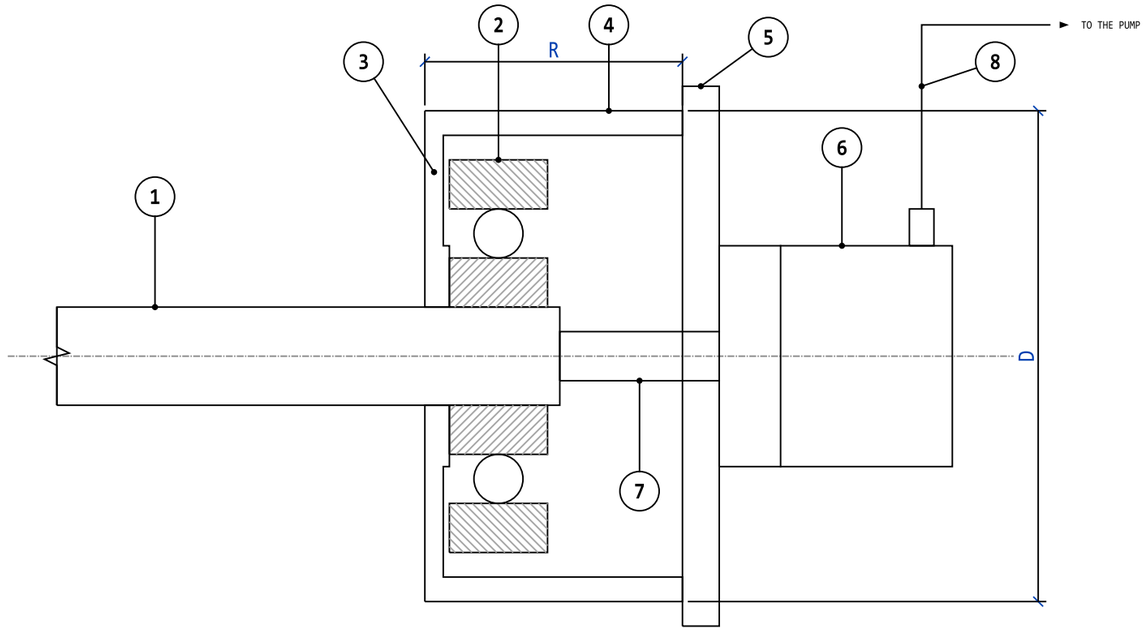
SECTION THROUGH THE SHAFT - PULLER IN POSITION

NOT TO SCALE



THE JAWS PULL ON THE INNER RING, WHICH IS THE TIGHT RING

THE RAM PUSHES ON THE SHAFT END, ON THE CENTRELINE

R IS THE REACH OF THE LEGS; D IS THE SPREAD OF THE LEGS

NOTES

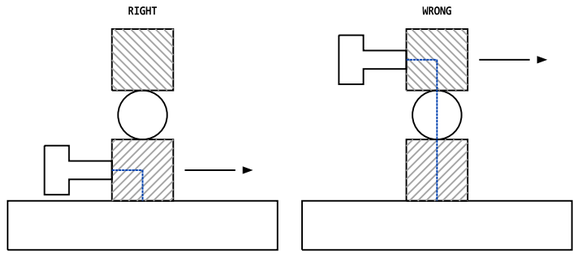
1. REFERENCE ARRANGEMENT OF A HYDRAULIC PULLER SYSTEM. LETTERS ARE DIMENSIONS SET BY DESIGN: NO FORCE, PRESSURE, STROKE, SIZE OR QUANTITY VALUE IS GIVEN.
2. THE SECTION SHOWS A SHAFT WITH A BEARING FITTED TIGHT NEAR ITS END. TWO LEGS REACH ALONG THE SHAFT FROM THE CROSSHEAD, AND THEIR JAWS HOOK BEHIND THE INNER RING. THE CYLINDER STANDS ON THE CENTRELINE AND ITS RAM BEARS ON THE SHAFT END.
3. R IS THE REACH OF THE LEGS; D IS THE SPREAD OF THE LEGS, THEY ARE SET EQUAL AND PARALLEL TO THE SHAFT, AND RATED, WITH THE CROSSHEAD, FOR THE WHOLE PULL.
4. DETAIL A: THE PULL GOES ON THE RING THAT IS FITTED TIGHT. A PULL ON THE OTHER RING PASSES THROUGH THE ROLLING ELEMENTS AND MARKS THE RACEWAYS.
5. DETAIL B: THE CYLINDER IS SET ON THE CENTRELINE OF THE SHAFT, SO THAT THE PART SLIDES OFF STRAIGHT. A PULL OFF THE LINE COCKS THE PART, WHICH JAMS AND SCORES THE SHAFT.
6. DETAIL C: A GUARD STANDS BETWEEN THE PULLER AND THE OPERATOR, WHO STANDS TO ONE SIDE AND NEVER IN LINE WITH THE PULL.
7. THE HYDRAULIC CIRCUIT AND THE TROLLEY-MOUNTED VERSION ARE ON SHEET 002. CATALOGUE ITEMS ARE BOUGHT IN.

ITEMS

ITEM	DESCRIPTION
1	SHAFT
2	BEARING - THE PART TO BE DRAWN OFF
3	JAW
4	LEG
5	CROSSHEAD
6	HYDRAULIC CYLINDER
7	RAM
8	HOSE

DETAIL A - PULL THE TIGHT RING

NOT TO SCALE



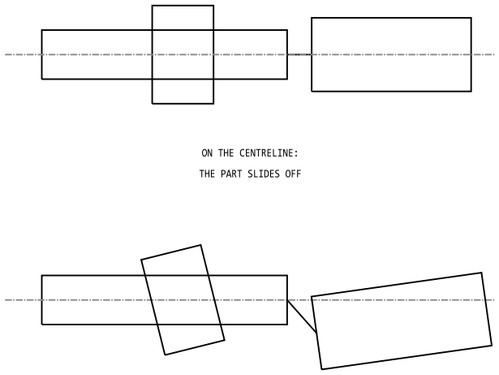
THE INNER RING TAKES THE PULL

THE PULL PASSES THROUGH THE ROLLING ELEMENT

THE ROLLING ELEMENTS MARK THE RACEWAYS WHEN THE PULL GOES THROUGH THEM

DETAIL B - IN LINE WITH THE SHAFT

NOT TO SCALE

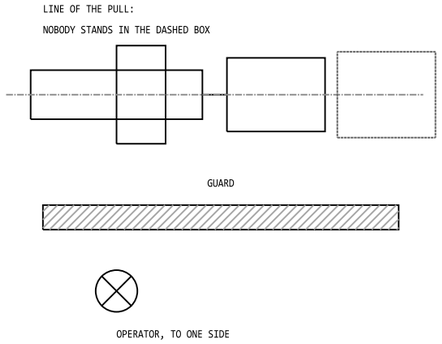


ON THE CENTRELINE: THE PART SLIDES OFF

OFF THE LINE: THE PART COCKS, JAMS AND SCORES

DETAIL C - GUARD AND POSITION

NOT TO SCALE



OPERATOR, TO ONE SIDE

REFERENCE CONFIGURATION - NOT FOR CONSTRUCTION

NEOMETRIX DEFENCE LIMITED

ENGINEERED IN NOIDA - INDIA

HYDRAULIC PULLER SYSTEM - REFERENCE CONFIGURATION

PULLER ARRANGEMENT AND DETAILS

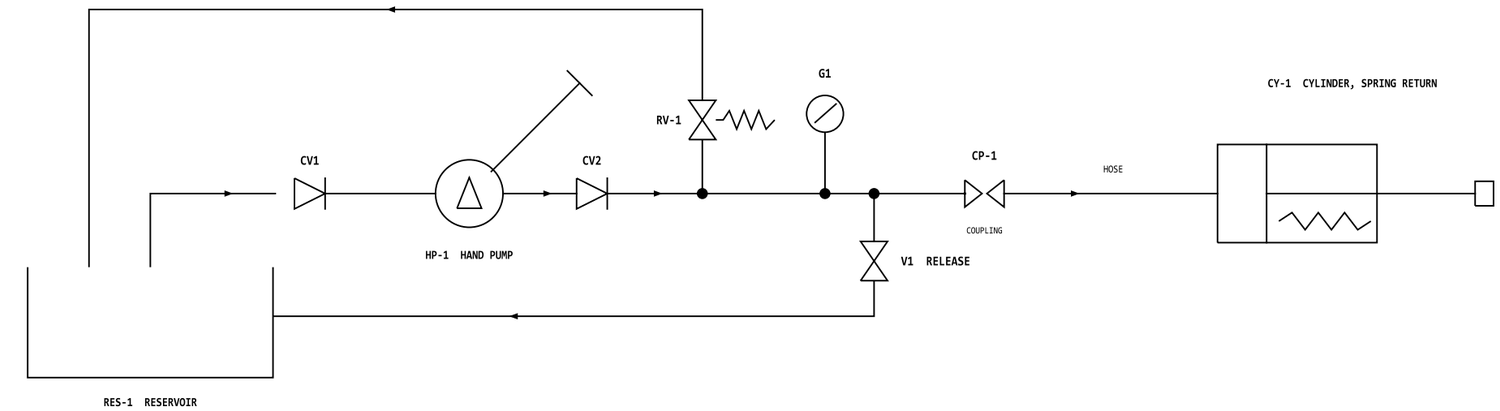
SECTION THROUGH THE SHAFT AND THE THREE DETAILS

DWG NO	SCALE @ A3	SHEET	REV
NMX-HPS-100-001	NTS	1 OF 2	A
DATE	UNITS	DRAWN	STATUS
13-11-2026	TAGS ONLY	NMX-DO	REFERENCE

HYDRAULIC PULLER SYSTEM - REFERENCE HYDRAULIC CIRCUIT

NOT TO SCALE - TAGS ONLY, NO PROCESS VALUES

HYDRAULIC CIRCUIT - ONE PUMP, ONE CYLINDER



V1 OPENS SLOWLY, SO THAT THE LOAD COMES OFF GRADUALLY

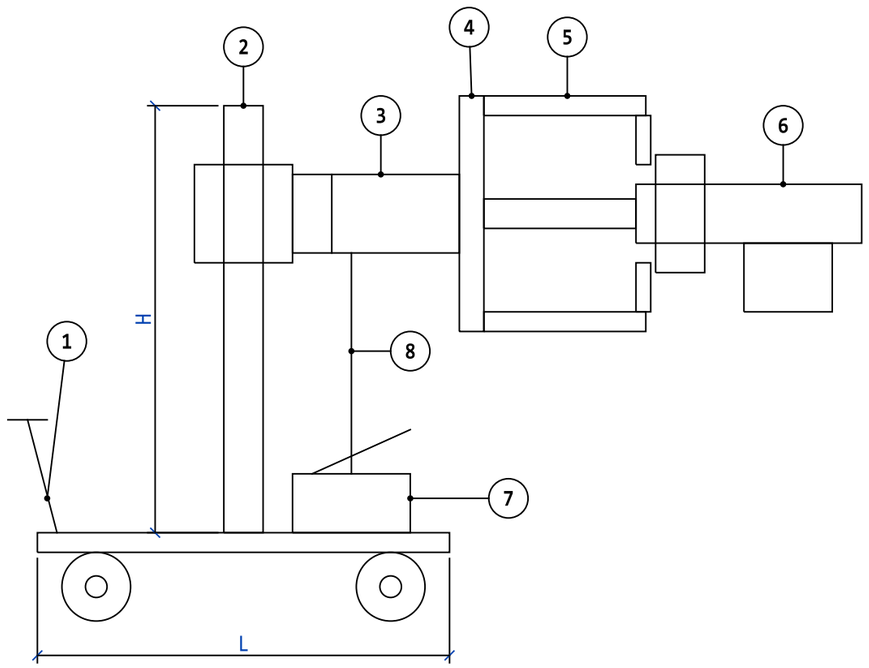
RV-1 LIMITS THE PRESSURE TO THE RATING OF THE WHOLE PULLER

LEGEND

HAND PUMP · CHECK VALVE · RELIEF VALVE · HAND VALVE · GAUGE · COUPLING · RESERVOIR · CYLINDER

TROLLEY-MOUNTED PULLER - ELEVATION

NOT TO SCALE



THE TROLLEY HOLDS THE CYLINDER ON THE CENTRELINE OF THE SHAFT,

SO THAT NO ONE HAS TO HOLD IT

WHAT EACH STEP DOES

STEP	WHAT HAPPENS
1 PUMP	THE LEVER RAISES THE PRESSURE; CV1 AND CV2 SET THE DIRECTION
2 PULL	OIL TO CY-1 DRIVES THE RAM; RV-1 LIMITS THE FORCE
3 HOLD	CV2 HOLDS THE LOAD WHILE V1 STAYS CLOSED
4 RELEASE	V1 OPENS SLOWLY AND THE SPRING RETURNS THE RAM

NOTES

1. REFERENCE HYDRAULIC CIRCUIT AND TROLLEY-MOUNTED PULLER OF A HYDRAULIC PULLER SYSTEM, DRAWN IN THE STYLE OF THE GRAPHICAL SYMBOLS OF FLUID POWER. TAGS AND LETTERS ONLY: NO FORCE, PRESSURE, STROKE, SIZE OR QUANTITY VALUE IS GIVEN.
2. THE HAND PUMP HP-1 DRAWS OIL FROM RES-1 THROUGH THE CHECK VALVE CV1 AND DELIVERS IT THROUGH CV2. THE RELIEF VALVE RV-1 LIMITS THE PRESSURE, SO THAT THE PUMP CANNOT LOAD THE PULLER BEYOND ITS RATING, AND G1 SHOWS IT.
3. THE HOSE IS JOINED BY THE SELF-SEALING COUPLING CP-1, WHICH KEEPS THE OIL IN WHEN THE HOSE IS DISCONNECTED. THE SINGLE-ACTING CYLINDER CY-1 IS RETURNED BY ITS SPRING.
4. V1 RELEASES THE LOAD. IT OPENS SLOWLY, SO THAT THE LOAD COMES OFF GRADUALLY AND THE PART IS NOT FREED SUDDENLY.
5. THE ELEVATION SHOWS THE TROLLEY, THE COLUMN AND CARRIAGE THAT HOLD THE CYLINDER ON THE CENTRELINE OF THE SHAFT, THE CROSSHEAD, THE LEGS WITH THEIR JAWS, A SHAFT WITH A RING FITTED TIGHT, AND THE HAND PUMP ON THE TROLLEY. L IS THE LENGTH OF THE TROLLEY; H IS THE HEIGHT OF THE COLUMN.
6. A GUARD STANDS BETWEEN THE PULLER AND THE OPERATOR. IT IS NOT DRAWN HERE: SEE SHEET 001, DETAIL C.
7. LINES THAT CROSS ARE NOT CONNECTED. A DOT SHOWS A CONNECTION. THE ARRANGEMENT AND THE DETAILS ARE ON SHEET 001. CATALOGUE ITEMS ARE BOUGHT IN.

ITEMS

ITEM	DESCRIPTION
1	TROLLEY
2	COLUMN AND CARRIAGE
3	HYDRAULIC CYLINDER
4	CROSSHEAD
5	LEG AND JAW
6	SHAFT AND RING
7	HAND PUMP
8	HOSE

REFERENCE CONFIGURATION - NOT FOR CONSTRUCTION

NEOMETRIX DEFENCE LIMITED

ENGINEERED IN NOIDA - INDIA

HYDRAULIC PULLER SYSTEM - REFERENCE CONFIGURATION

HYDRAULIC CIRCUIT AND TROLLEY

THE HAND PUMP, THE CYLINDER AND THE TROLLEY-MOUNTED PULLER

DWG NO	SCALE @ A3	SHEET	REV
NMX-HPS-100-002	NTS	2 OF 2	A
DATE	UNITS	DRAWN	STATUS
13-11-2026	TAGS ONLY	NMX-DO	REFERENCE