



Monoblock and stackable diverters

EDM06A-EDS06A

Rev. 00 • October, 2025

TECHNICAL CATALOGUE



.....
Diverters



HISTORY OF REVISIONS

| DATE | PAGE | CHANGED | REV. |
|---------------|------|---------------|------|
| October, 2025 | - | First edition | 00 |

ABOUT THE MANUAL

This manual contains the technical instructions for the diverters range.
All information given in this manual is current and valid according to the information available at the time of publication.
The data specified above only serve to describe the product. EBI Motion controls reserves to modify or revise the instructions without prior notice.

EBI Motion controls is not responsible for any damage caused by an incorrect use of the product.
Please visit www.ebimc.com for the most recent version of this manual.

CONTENTS

| | |
|----|-----------------------------------|
| 4 | INTRODUCTION |
| 5 | GENERAL INFORMATION |
| 6 | GENERAL INSTRUCTIONS |
| 8 | QUICK REFERENCE GUIDE - EDM |
| 9 | QUICK REFERENCE GUIDE - EDS |
| | STANDARD THREADS |
| 10 | DIMENSIONS - EDM06A |
| 11 | DIMENSIONS - EDS06A |
| 12 | PORT DETAILS |
| 13 | TECHNICAL DATA |
| | HYDRAULIC FLUID |
| 15 | APPLICATION AND SAFETY GUIDELINES |
| 16 | ORDERING CODES - EDM06A |
| 17 | ORDERING CODES - EDS06A |
| 24 | INSTALLATION AND MAINTENANCE |
| 25 | SPARE PARTS LIST |



INTRODUCTION

DIVERTERS

EBI motion controls diverter valves (monoblock and stackable) are used to pilot remote of directional control valves, auxiliary valves, variable displacement pumps and motors, frictions and hydraulic brakes, all with high accuracy, safety and optimal performance. EBI motion controls diverters are maintenance free and have a long life cycle and are suited for specialized applications for a variety of mobile equipment such as:



Backhoe loaders



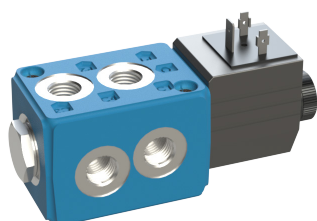
Telehandler machines



Agricultural machinery



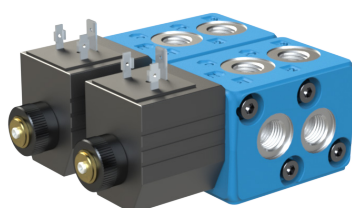
Excavator machines



EDM06A

MONOBLOCK DIVERTERS

Usable as stand-alone.
Directional spool valve with direct solenoid control.
Coils with different connectors and voltage are available.
Compact design and easy mounting.
Integrated threaded ports.



EDS06A

STACKABLE DIVERTERS

Usable as multiple stackable units.
Directional spool valve with direct solenoid control.
Coils with different connectors and voltage are available.
Compact design and easy mounting.
Integrated threaded ports.

GENERAL INFORMATION

HYDRAULIC OPERATING PRINCIPLE

EBI diverter valves are suitable to intercept and divert the flow on hydraulic system, wherever movement sequence or control selection of different actuators is needed.

A valve basically consists of a housing (1), a control spool (2), a return spring (3) and a solenoid (4).

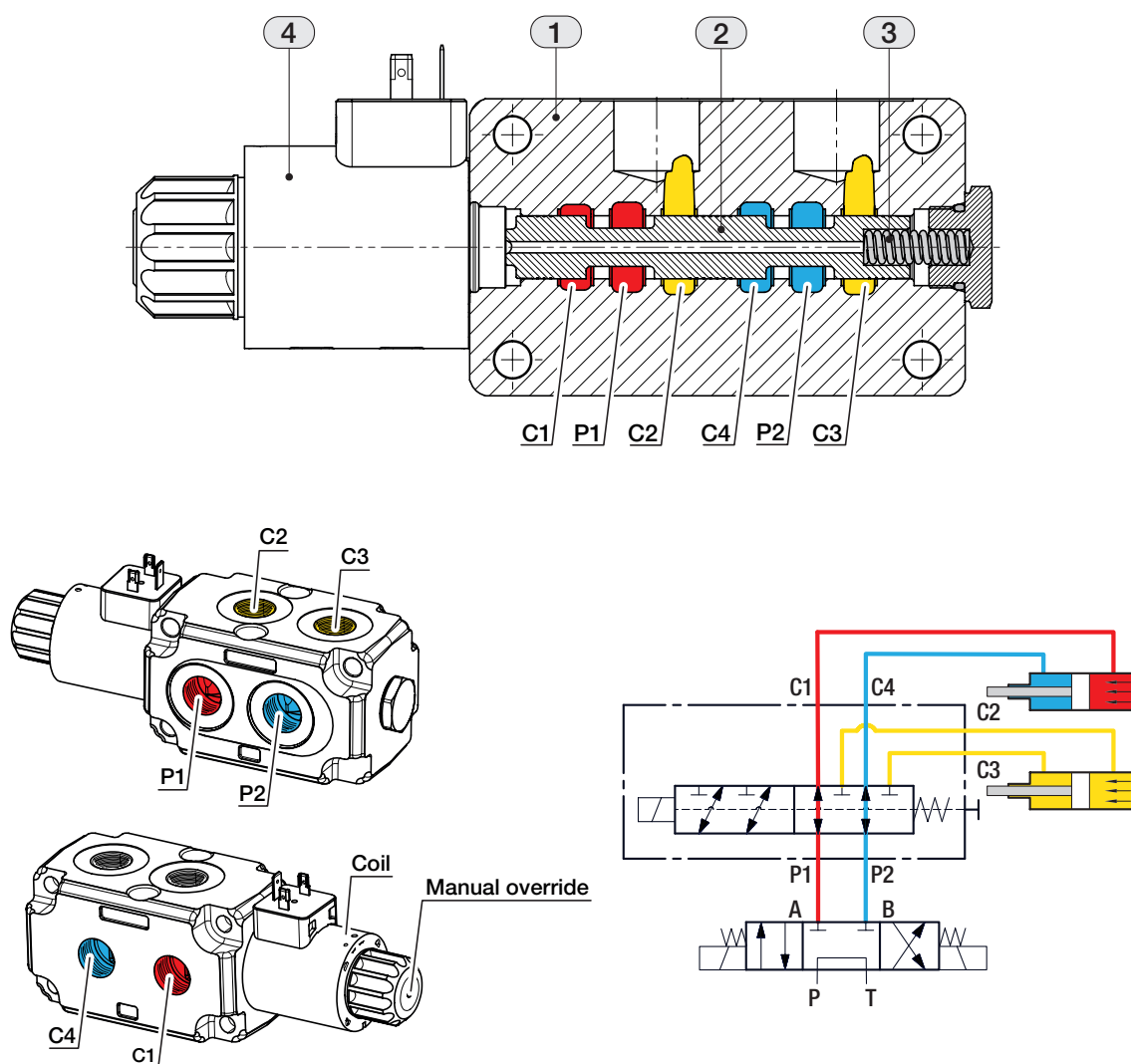
It is designed to connect two inlet lines P1 – P2 (normally a set of hoses) and divert them to either the outlet ports (C1 – C4) with spool in position “0”, when the solenoid is de-energized, or to the outlet ports (C2 – C3) with spool in position “1”, when the solenoid is energized.

With the coil de-energized, the return spring pushes back the spool and holds it in position “0”.

The coil is fastened to the tube by the ring nut. The manual override allows to shift the spool also in case of voltage shortage. An external drain, to be connected to tank, ensures shifting operations also at higher working pressure.

EXAMPLE OF CONNECTION

This drawing represents a EDM08A with DIN 43650 ISO 4400 Solenoid kit and internal drain circuit



GENERAL INSTRUCTIONS

INTENDED USE

EDM-EDS diverters are designed for mobile applications.

WARRANTY

Check the package and the product for transport damage when receiving goods. The package is not meant for long term storage; protect the product appropriately.

Do not dismantle the product. The warranty is void if the product has been disassembled.

The manufacturer is not responsible for damages resulting from misinterpreted, noncompliance, incorrect, or improper use of the product that goes against the instructions given in this document.

GENERAL SAFETY INSTRUCTIONS

The following instructions apply to all procedures associated with the product. Read these instructions carefully and follow them closely.

- Use necessary personal protective equipment when working with the product.
- Support the product properly; make sure the product cannot fall over or turn around by accident.
- Use only appropriate equipment and attachments for lifting and transferring the product.
- Always use the lifting equipment properly and check the load-bearing capacity.
- Prevent unintended use of the product during installation and maintenance procedures.

WARNING SYMBOL

The following symbols can be used in this manual:



Note:
Useful information



Danger:
Danger of death or injury



Attention:
May cause damage to the product

PRODUCT IDENTIFICATION

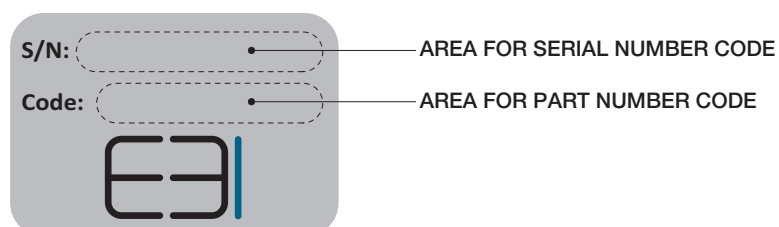
The product identification data can be found on the identification plate attached to the EBI product.

SERIAL NUMBER

all manufacturing data and all sales data can be found with the serial number

PART NUMBER CODE

It is a number univocally identifying the configuration and pressure setting of a valve



Note:

Serial number and part number code have 9 characters (letters and numbers).

UNITS OF MEASURE - CONVERSION FACTORS

| LENGHT | FLOW RATE | MASS | FORCE WEIGHT | PRESSURE |
|------------------|--------------------------|------------------|------------------|--------------------|
| 1 mm = 0,0394 in | 1 l = 0,2200 gal UK | 1 kg = 2,205 lb | 1 N = 0,1020 Kgf | 1 bar = 100000 Pa |
| 1 in = 25,4 mm | 1 l = 0,2642 gal US | 1 lb = 0,4536 kg | 1 Kgf = 9,8067 N | 1 bar = 14,5 psi |
| | 1 gal UK = 4,546 l | | | 1 Pa = 0,0001 bar |
| | 1 gal UK = 1,2010 gal US | | | 1 Pa = 0,00014 psi |
| | 1 gal US = 3,785 l | | | 1 psi = 0,0689 bar |
| | 1 gal US = 0,8327 gal UK | | | 1 psi = 6890 Pa |



QUICK REFERENCE GUIDE - EDM

The EDM series diverters are used to connect several circuits by different spools.
Nominal flow rate from 25 to 150 l/min.

| TYPE | | EDM06A | EDM08A | EDM10A | EDM12A |
|---|-----------------------|--------------------|---------------------|---------------------|-----------------------|
| Number of ways | | 6-7* | 6-7* | 6-7* | 6-7* |
| Number of sections | | 1 | 1 | 1 | 1 |
| Nominal flow (l/min) - [GPM] | | 25 [7] | 50 [14] | 100 [28] | 150 [42] |
| Internal leakage $P_1(P_2) \rightarrow C_2(C_3) / C_1(C_4)$ $\Delta p = 100 \text{ bar} / T = 40^\circ\text{C}$ | | < 25 | | | |
| Operating pressure (bar) [psi] | | 250 [3625] | | | |
| Operating pressure by using external drain (bar) [psi] | | 310 [4500] | | | |
| Diverter valve stroke (mm) [in] | | 2,8 [0.11] | 3,2 [0.13] | 3,2 [0.13] | 3,8 [0.15] |
| Weight (Kg) [lb] | | 1,5 [3.3] | 3,8 [8.4] | 3,8 [8.4] | 5,8 [12.8] |
| SOLENOID ACTUATION | | EDM06A | EDM08A | EDM10A | EDM12A |
| Solenoid 12 VDC | | • | • | • | • |
| Solenoid 24 VDC | | • | • | • | • |
| Note: different type of coil connectors are available | | | | | |
| SPOOL ACTUATION | | EDM06A | EDM08A | EDM10A | EDM12A |
| Without drain | | • | • | • | • |
| With drain | | • | • | • | • |
| PORT SIZE (BSP) - [SAE] | THREAD CLASSIFICATION | EDM06A | EDM08A | EDM10A | EDM12A |
| Inlet port (P1 - P2) Service port (C1 - C4) Service port (C2 - C3) | BSP - ISO 1179-1 | G 1/4 | G 3/8 | G 1/2 | G 3/4 |
| | UN/UNF ISO 11926-1 | 9/16-18 UNF (SAE6) | 3/4-16 UNF (SAE8) | 7/8-14 UNF (SAE10) | 1"1/16-12 UNF (SAE12) |
| | BSP - ISO 228 d | | G 3/8 JIS B 2351 | G 1/2 JIS B 2351 | |
| Drain port (D) | BSP - ISO 1179-1 | G 1/4 | | | |
| | UN/UNF ISO 11926-1 | 7/16-20 UN (SAE4) | | | |

(*) = every diverter valve is available with 7 ways by a special spool and a special plug.

QUICK REFERENCE GUIDE - EDS

The EDS series diverters are used to connect several circuits by different spools.

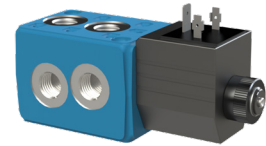
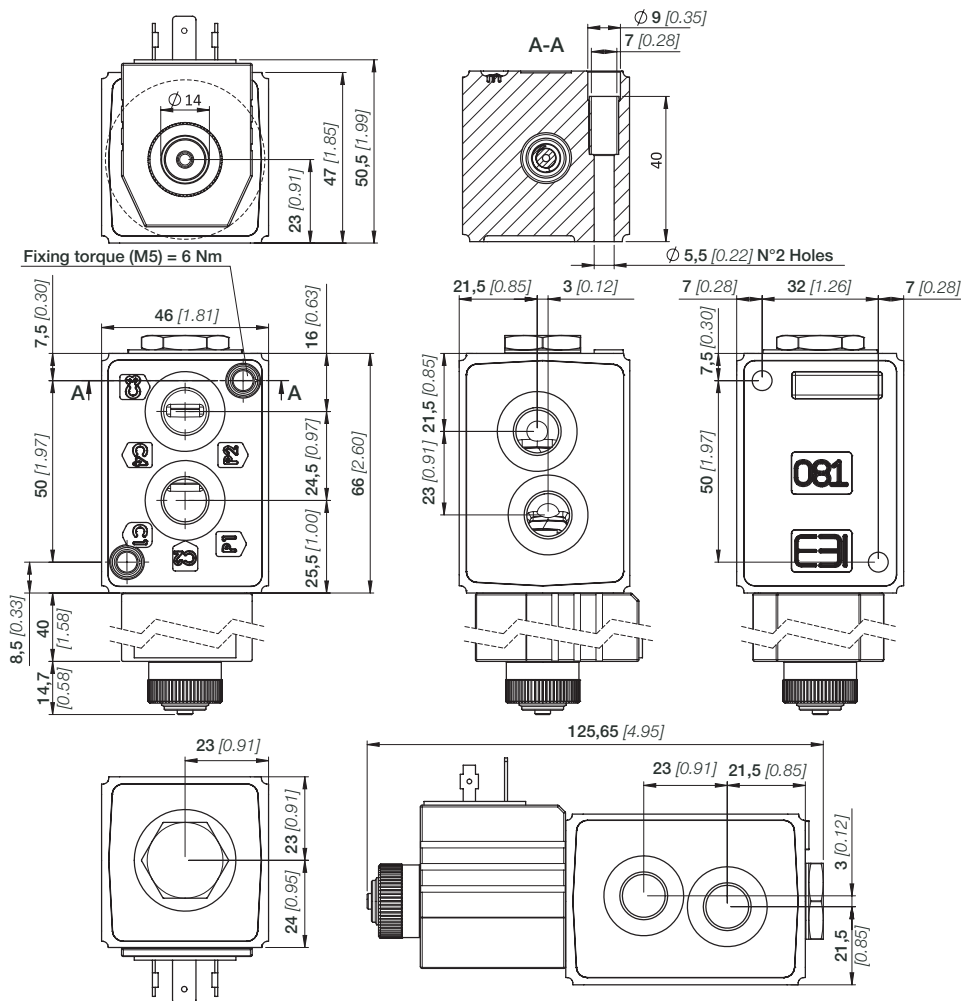
It is possible to stack up to 4 sections. Nominal flow rate from 25 to 150 l/min.

| TYPE | | EDS06A | EDS08A | EDS10A | EDS12A |
|---|-----------------------|--------------------|---------------------|---------------------|-----------------------|
| Number of ways | | 6-7* | 6-7* | 6-7* | 6-7* |
| Number of sections | | 2 up 4 | 2 up 4 | 2 up 4 | 2 up 4 |
| Nominal flow (l/min) - [GPM] | | 25 [7] | 50 [14] | 100 [28] | 150 [42] |
| Internal leakage $P_1(P_2) \rightarrow C_2(C_3) / C_1(C_4)$ $\Delta p = 100 \text{ bar} / T = 40^\circ\text{C}$ | | < 25 | | | |
| Operating pressure (bar) [psi] | | 250 [3625] | | | |
| Operating pressure with external drain (bar) [psi] | | 310 [4500] | | | |
| Diverter valve stroke (mm) [in] | | 2,8 [0.11] | 3,2 [0.13] | 3,2 [0.13] | 3,8 [0.15] |
| Weight (Kg) [lb] - (Each valve) | | 1,5 [3.3] | 3,8 [8.4] | 3,8 [8.4] | 5,8 [12.8] |
| SOLENOID ACTUATION | | EDS06A | EDS08A | EDS10A | EDS12A |
| Solenoid 12 VDC | | • | • | • | • |
| Solenoid 24 VDC | | • | • | • | • |
| Note: different type of coil connectors are available | | | | | |
| SPOOL ACTUATION | | EDS06A | EDS08A | EDS10A | EDS12A |
| Without drain | | • | • | • | • |
| With drain | | • | • | • | • |
| PORT SIZE (BSP) - [SAE] | THREAD CLASSIFICATION | EDS06A | EDS08A | EDS10A | EDS12A |
| Inlet port (P1 - P2) Service port (C1 - C4) Service port (C2 - C3) | BSP - ISO 1179-1 | G 1/4 | G 3/8 | G 1/2 | G 3/4 |
| | UN/UNF ISO 11926-1 | 9/16-18 UNF (SAE6) | 3/4-16 UNF (SAE8) | 7/8-14 UNF (SAE10) | 1"1/16-12 UNF (SAE12) |
| | BSP - ISO 228 d | | G 3/8 JIS B 2351 | G 1/2 JIS B 2351 | |
| Drain port (D) | BSP - ISO 1179-1 | G 1/4 | | | |
| | UN/UNF ISO 11926-1 | 7/16-20 UN (SAE4) | | | |

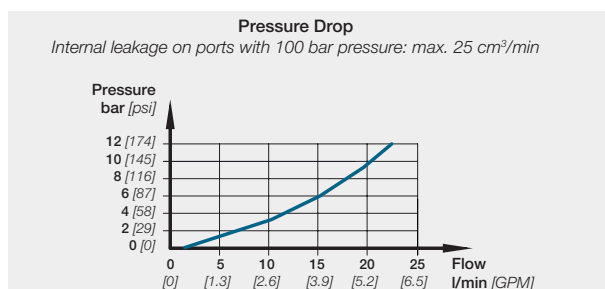
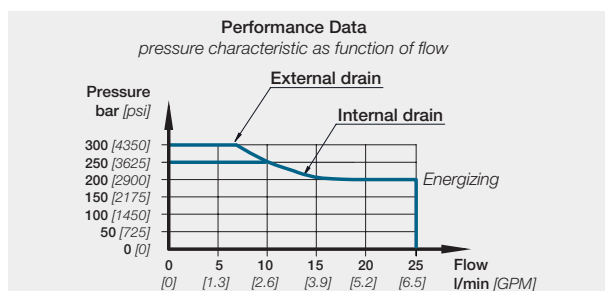
(*) = every diverter valve is available with 7 ways by a special spool and a special plug.

DIMENSIONS - EDM06A

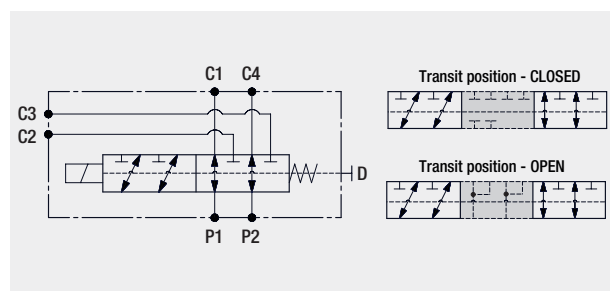
This drawing represents a EDM06A with DIN 43650 ISO 4400 Solenoid kit, internal drain circuit with BSP connections.



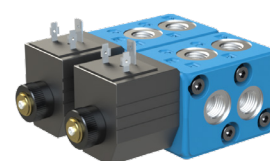
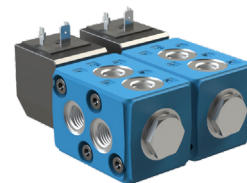
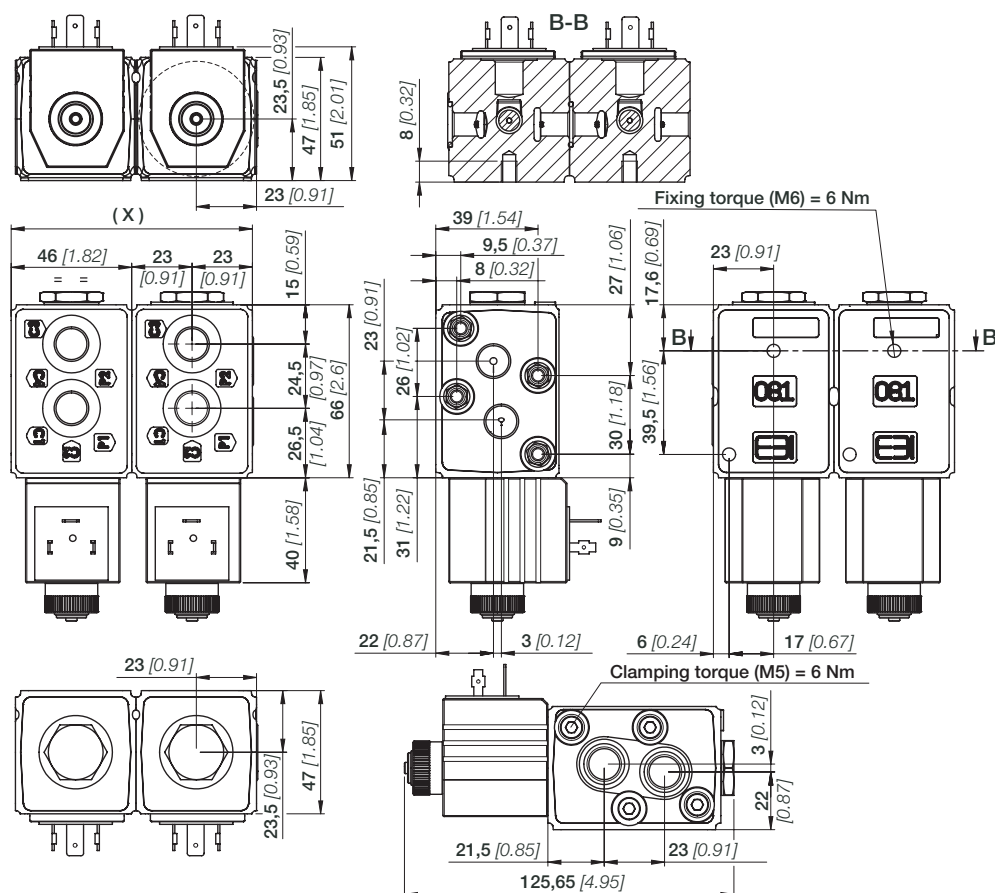
TYPICAL CURVES



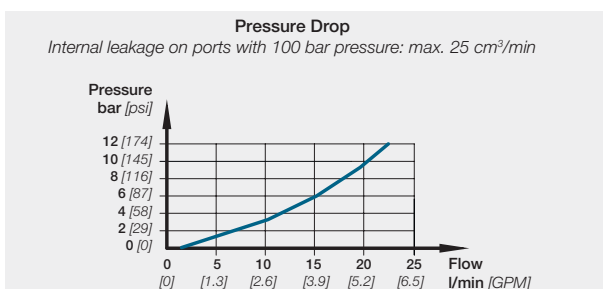
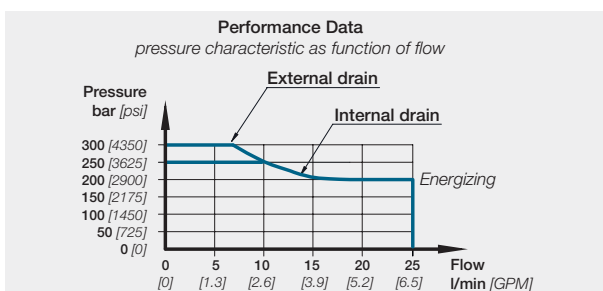
HYDRAULIC SCHEMA



DIMENSIONS - EDS06A



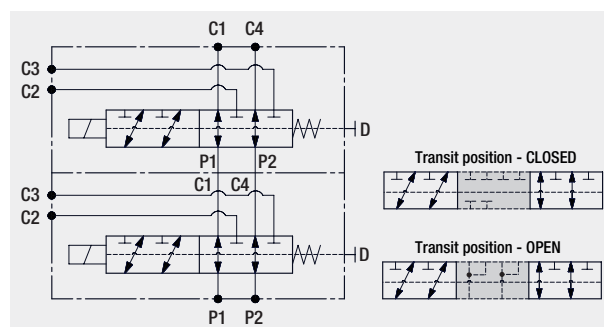
TYPICAL CURVES



HYDRAULIC SCHEMA

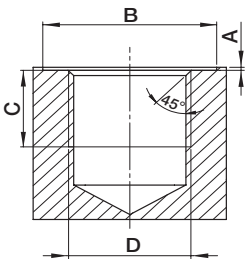
| TYPE | DIMENSION (X) mm - [in] | WEIGHT kg - [lb] |
|----------|----------------------------|---------------------|
| EDS06A/2 | 92 - [3.64] | 3 - [6.6] |
| EDS06A/3 | 138 - [5.46] | 4.5 - [9.9] |
| EDS06A/4 | 184 - [7.28] | 6 - [13.2] |

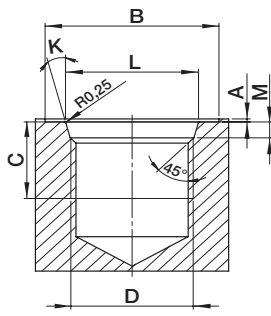
HYDRAULIC SCHEMA

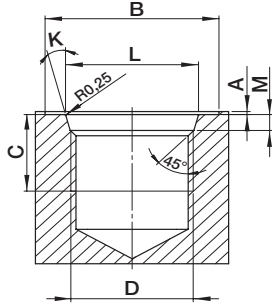


PORT DETAILS

The connection port size is indicated by an ordering code common for all EBI products.
Following tables show all available connections.

| <div> <div>BSP THREADS ISO 1179-1</div>  </div> | D | C | | B | | A | | CODE |
|--|-------------|----|------|----|------|-----|-------|-----------|
| | UNI-ISO 228 | mm | inc | mm | inc | mm | inc | |
| | | | | | | | | |
| | G 1/4 | 13 | 0.51 | 19 | 0.75 | 1 | 0.094 | 1B |
| | G 3/8 | 13 | 0.51 | 25 | 0.98 | 1 | 0.04 | 2B |
| | G 1/2 | 15 | 0.59 | 29 | 1.14 | 1.5 | 0.06 | 3B |
| | G 3/4 | 17 | 0.67 | 36 | 1.42 | 1.5 | 0.06 | 4B |
| | G 1 | 19 | 0.75 | 45 | 1.77 | 2 | 0.08 | 5B |

| <div> <div>UN/UNF THREADS ISO 11926-1</div>  </div> | D | C | | B | | L | | M | | K | A | | CODE |
|--|-----------------------|----|------|----|------|------|------|-----|-------|-----|-----|------|-----------|
| | ASA-B1-1 | mm | inc | mm | inc | mm | inc | mm | inc | | mm | inc | |
| | | | | | | | | | | | | | |
| | 7/16-20 UNF (SAE4) | 12 | 0.47 | 19 | 0.75 | 12.5 | 0.49 | 2.4 | 0.095 | 12° | 1 | 0.04 | 0S |
| | 9/16-18 UNF (SAE6) | 13 | 0.51 | 26 | 1.02 | 15.6 | 0.61 | 2.5 | 0.098 | 12° | 1 | 0.04 | 1S |
| | 3/4-16 UNF (SAE8) | 15 | 0.59 | 30 | 1.18 | 20.6 | 0.81 | 2.6 | 0.102 | 15° | 1.5 | 0.06 | 2S |
| | 7/8-14 UNF (SAE10) | 17 | 0.67 | 34 | 1.34 | 23.9 | 0.94 | 2.6 | 0.102 | 15° | 1.5 | 0.06 | 3S |
| | 1"1/16-12 UNF (SAE12) | 20 | 0.79 | 41 | 1.61 | 29.2 | 1.15 | 3.3 | 0.13 | 15° | 1.5 | 0.06 | 4S |
| | 1"5/16-12 UNF (SAE16) | 20 | 0.79 | 50 | 1.97 | 35.5 | 1.40 | 3.3 | 0.13 | 15° | 2 | 0.08 | 5S |

| <div> <div>BSP THREADS ISO 228 d</div>  </div> | D | C | | B | | L | | M | | K | A | | CODE |
|---|------------|----|------|----|------|------|------|-----|-------|-----|-----|------|-----------|
| | JIS B 2351 | mm | inc | mm | inc | mm | inc | mm | inc | | mm | inc | |
| | | | | | | | | | | | | | |
| | G 3/8 | 12 | 0.47 | 26 | 1.02 | 18.6 | 0.73 | 2.5 | 0.098 | 15° | 1 | 0.04 | 2J |
| | G 1/2 | 16 | 0.63 | 34 | 1.34 | 22.6 | 0.89 | 2.5 | 0.098 | 15° | 1.5 | 0.06 | 3J |

TECHNICAL DATA

All performances in this catalogue are obtained using mineral based hydraulic oil 46 cSt viscosity at 40°C (ISO VG 46 viscosity class). All diverters go through functional testing at these conditions before shipment.

HYDRAULIC STANDARD SPECIFICATIONS

Hydraulic fluid **Mineral Oil HL, HLP (DIN 51524)** phosphate ester (HFD-R)
 Fluid temperature range **-20°C +80°C [-4°F +176°F]**
 Fluid viscosity range **10 ÷ 380 cSt**
 Max contamination level **9 (NAS 1638)** - 20/18/15 (ISO 4406:1999)
 Recommended filtration **B10 > 75** - (ISO 16889:20008)

MATERIAL STANDARD SPECIFICATIONS

Body material **Cast iron**

SEALS

O-Rings: **Buna N** (acrylonitrile butadiene), also named **NBR** (according to ASTM), compatible with fluids having mineral oil base, water in oil emulsions, and water glycol fluids.

These seals are standard for temperatures within the range -20°C and +80°C

Back-up rings and Slide rings: **strengthened PTFE** (Politetrafluoroetilene like Teflon®, Lubriflon®, Ecoflon®, or similar).

Special FPM (Viton®) seals are available on request.

Note: the seal materials are compatible with the fluids normally used in hydraulic systems; in case of special fluids, if you suspect incompatibility between the fluid used and the standard seals, contact the EBI motion controls service network.

HYDRAULIC FLUID

Mineral oil based hydraulic fluids suitable for hydraulic systems can be used; they should have physical lubricating and chemical properties as specified by:

MINERAL OIL BASED HYDRAULIC FLUIDS HL (DIN 51524 part 1)

MINERAL OIL BASED HYDRAULIC FLUIDS HLP (DIN 51524 part 2)

For use of environmentally friendly fluids (vegetable or polyglycol base), or other fluids, please contact EBI.

| OIL AND SOLUTIONS - ISO 6743/4 | (°C) MIN | (°C) MAX | COMPATIBLE SEAL |
|---------------------------------------|----------|----------|-----------------|
| Mineral Oil HL, HM or HLP | -25 | +80 | NBR |
| Oil in water emulsion HFA | +5 | +55 | NBR |
| Oil in water emulsion HFB | +5 | +55 | NBR |
| Polyglycol-based aqueous solution HFC | -10 | +60 | NBR |

Hydraulic fluids are available in different viscosity classes identified by the ISO VG number, which corresponds to the kinematic viscosity at 40°C. Here is a table showing typical viscosity changes between 0°C and 100°C for mineral oil based fluids having various viscosity classes. The fluid should be selected with the aim to achieve an appropriate operating viscosity at the expected working temperature.

VISCOSITY CLASS AND FILTRATION DATA

| Viscosity class | kinematic viscosity (cSt) | | |
|-----------------|---------------------------|----------------|------------------|
| | maximum (0° C) | medium (40° C) | minimum (100° C) |
| ISO VG 10 | 90 | 10 | 2.4 |
| ISO VG 22 | 300 | 22 | 4.1 |
| ISO VG 32 | 420 | 32 | 5.0 |
| ISO VG 46 | 780 | 46 | 6.1 |
| ISO VG 68 | 1400 | 68 | 7.8 |
| ISO VG 100 | 2560 | 100 | 9.9 |

FLUID CLEANLINESS REQUIREMENTS

The cause of malfunctions in hydraulics is often found to be excessive fluid contamination. The hard contaminant particles in the fluid wear the hydraulic components and prevent the poppets from re-seating, with consequent internal leakage and system inefficiency. For the correct operation it is necessary to adopt filtration methods which guarantee for life the specified fluid cleanliness level. It is important to ensure that hydraulic fluids are brought to the appropriate cleanliness level prior filling up the systems, and, when in doubt, also to flush the hydraulic components prior to installation.

FILTRATION RATIO $BETA_x$:

It is the ratio between the number of particles before and after the filter with diameter larger than X micron.

ABSOLUTE FILTRATION RATIO ISO 4572:

It is the diameter X of the largest particle with $BETA_x \geq 75$.

CONTAMINATION CLASS ISO 4406:

It is expressed by 3 scale numbers representing respectively: the number of particles equal to or larger than 4µm, the number of particles equal to or larger than 6µm, the number of particles equal to or larger than 14µm contained in 1 ml of fluid.

CONTAMINATION CLASS NAS 1638:

it's expressed by one scale numbers representing the number of particles of different size ranges contained in 1 ml of fluid.

FILTRATION RECOMMENDATION

| Type | Nominal filtration (micron) | Absolute filtration rating ISO 4572 ($BETA_x \geq 75$) | Contamination class | |
|--|--------------------------------|---|---------------------|----------|
| | | | ISO 4406 | NAS 1638 |
| System/components operating at MEDIUM HIGH PRESSURE HIGH DUTY CYCLE APPLICATIONS Systems/components with MODERATELY dirt tolerance | 15 | X = 12... 15 | 20/18/15 | 9 |



Attention:

If the filtration demands are not met, the valve poppets can jam in the open position, with the result that the valve remains actuated. It is not possible to force back jammed poppets mechanically.

APPLICATION AND SAFETY GUIDELINES

STORAGE OF NEW PRODUCTS

Encapsulated by a protective wrapping, the products shall not be exposed to direct sunlight nor to source of heat or ozone and kept in a dry place at a temperature between -20°C $+50^{\circ}\text{C}$.

SAFETY GUIDELINES

During any operation on diverters, it is recommended to pay attention to components surfaces temperature.

STOCKING DIVERTERS

Encapsulated by a protective wrapping, the diverters shall not be exposed to direct sunlight nor to source of heat or ozone (like electric motors running) and kept in a dry place at a temperature between -20°C $+50^{\circ}\text{C}$

DIVERTERS INSTALLATION

It is recommended to follow these steps:

- Inspect the sub-plate to ensure that it is in good conditions and no external contaminant is present
- Check that O-Rings are intact and correctly positioned
- Don't tighten screws or connectors more than the maximum torque specified in the catalogue.

INLET VOLTAGE AND WORKING DUTY

To obtain correct operation and long life of coils it is necessary that the operating voltage fluctuations do not exceed $+5\%$ -10% of nominal voltage.

The working duty ED of a coil is the ratio between energized time and full cycle time.

All coils are rated for ED = 100% provided that temperature limit of their insulation class is not exceeded.



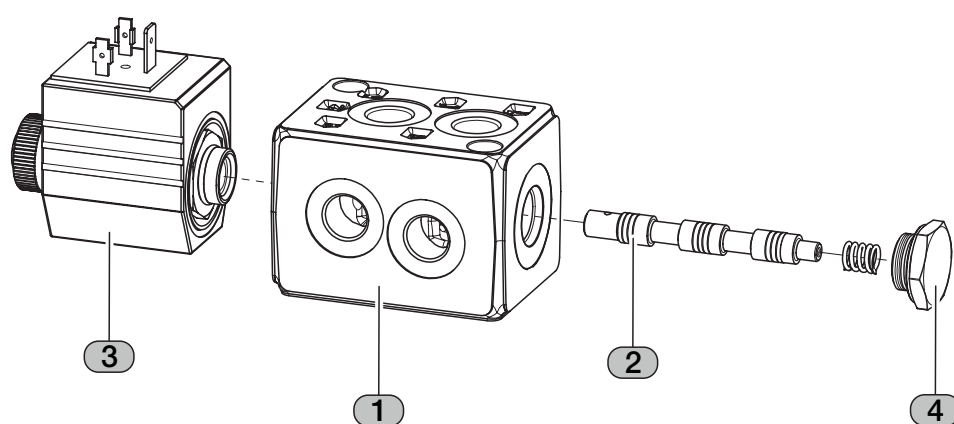
Attention:

These guidelines are not intended to be considered as complete

ORDERING CODES - EDM06A

The order code below provides an example of **MONOBLOCK DIVERTER EDM06A** with standard configuration. This example represents a EDM06A with solenoid kit, plug without drain and BSP arrangement. See pages 18 - 23 for more information about the different options available.

| Product | 1 | 2 | 3 | 4 |
|-------------|-------------|-------|---------|---------|
| E D M 0 6 A | B D 6 1 1 B | S 6 1 | A R 2 1 | R D 0 5 |

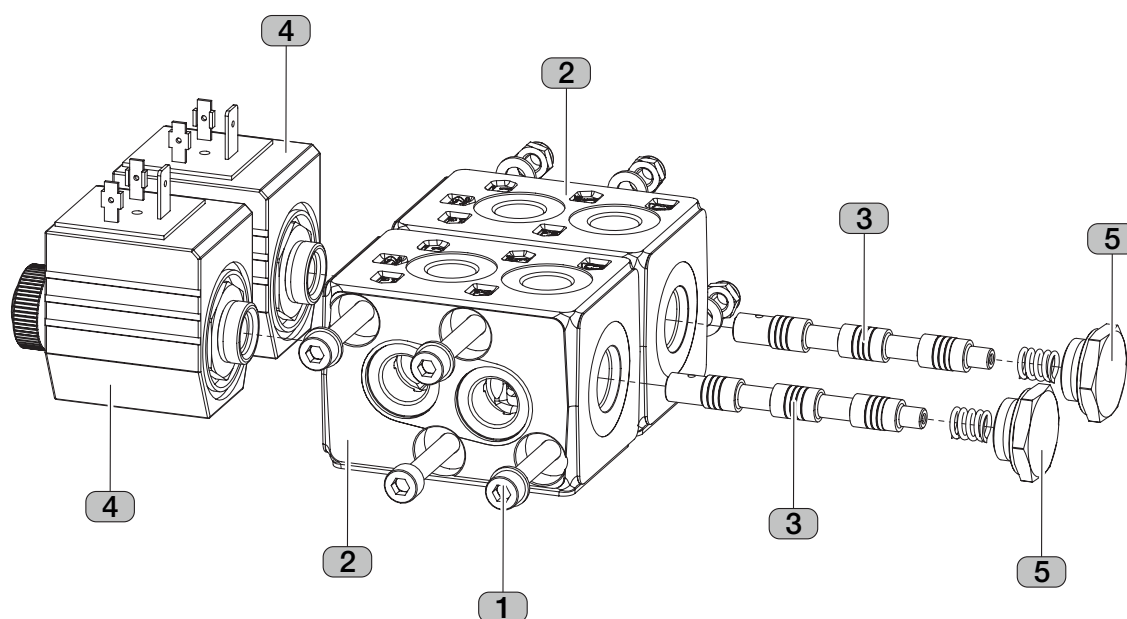


| POSITION | CODE | DESCRIPTION | PAGE |
|----------|---------------|------------------------|------|
| | EDM06A | Product | |
| 1 | BD611B | Body classification | 19 |
| 2 | S61 | Assembly spool | 20 |
| 3 | AR21 | Solenoid actuation kit | 21 |
| 4 | RD05 | Return action type | 23 |

ORDERING CODES - EDS06A

The order code below provides an example of **STACKABLE DIVERTER EDS06A** with standard configuration. This example represents a EDS08A with solenoid kit, plug without drain and BSP arrangement. See pages 18 - 23 for more information about the different options available.

| Product | 1 | 2 | 3 | 4 | 5 | 2 | 3 | 4 | 5 |
|-------------|-----|-------------|-------|---------|---------|-------------|-------|---------|---------|
| E D S 0 6 A | N 2 | B D 6 1 1 B | S 6 1 | A R 2 1 | R D 0 5 | B D 6 1 1 B | S 6 1 | A R 2 1 | R D 0 5 |



| | POSITION | CODE | DESCRIPTION | PAGE |
|----------------|----------|---------------|------------------------|------|
| info | | EDS06A | Product | |
| | 1 | N2 | Assembly section kit | 18 |
| | 2 | BD611B | Body classification | 19 |
| first section | 3 | S61 | Assembly spool | 20 |
| | 4 | AR21 | Solenoid actuation kit | 21 |
| | 5 | RD05 | Return action type | 23 |
| second section | 2 | BD611B | Body classification | 19 |
| | 3 | S61 | Assembly spool | 20 |
| | 4 | AR21 | Solenoid actuation kit | 21 |
| | 5 | RD05 | Return action type | 23 |



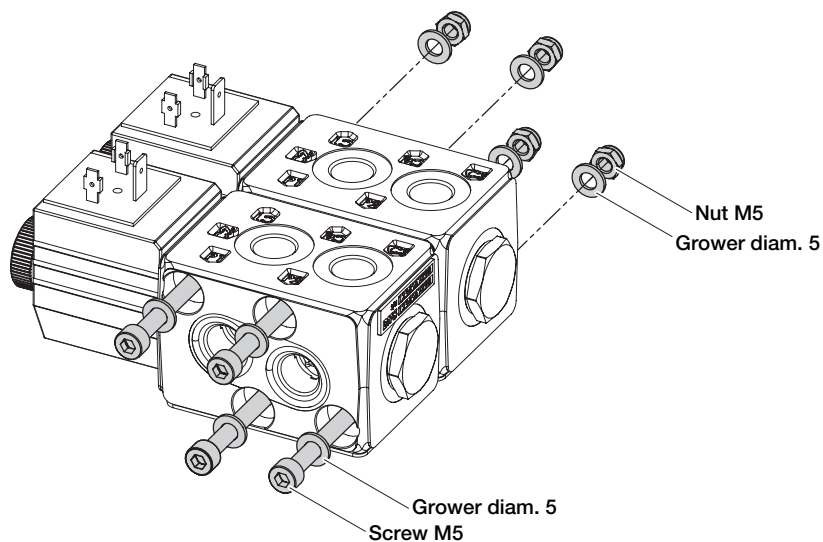
Note:

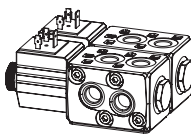
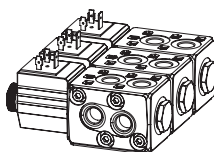
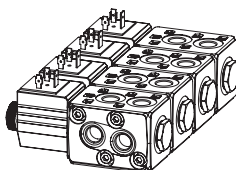
Ordering code from position 2 to 5, must be repeated for each section.

The maximum number of sections available is 4.

ASSEMBLY SECTION

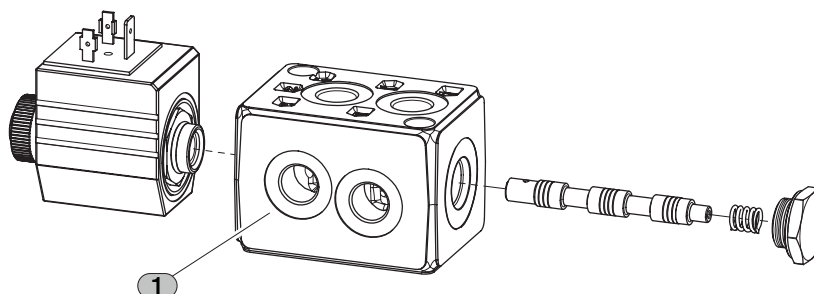
All stackable diverters include an assembly section kit. Each assembly section is composed by 4 screw, 8 growers and 4 nuts. Screw's lenght depends on the number of sections.



| CODE | DESCRIPTION | LENGHT SCREW | CLAMPING TORQUE | DRAWING |
|-----------|-------------------------|------------------|-----------------|---|
| N2 | Assembly for 2 sections | 85 mm - 3.35 in | 6 Nm |  |
| N3 | Assembly for 3 sections | 130 mm - 5.12 in | 6 Nm |  |
| N4 | Assembly for 4 sections | 180 mm - 7.10 in | 6 Nm |  |

BODY CLASSIFICATION

| Product | 1 | 2 | 3 | 4 |
|-------------|-------------|-------|---------|---------|
| E D M 0 6 A | B D 6 1 1 B | S 6 1 | A R 2 1 | R D 0 5 |



Diverter arrangement body is available in two configurations: SAE thread or BSP thread.
All threads present in each body are equal.

| CODE | DESCRIPTION | DRAWING | EDM06A | EDS06A |
|---------------|--|---------|--------|--------|
| BD611S | Standard body with ports P1-P2-C1-C4-C2-C3 9/16"-18 UNF (SAE6) | | • | • |
| BD611B | Standard body with ports P1-P2-C1-C4-C2-C3 G 1/4 | | • | • |

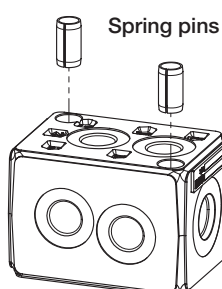
**Note:**

All EDM06A arrangement bodies are equipped with 2 spring pins UNI 6874 - ISO 13337 - 7X8,5X16.

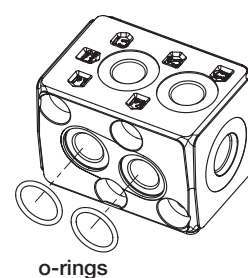
All EDS06A arrangement bodies are equipped with 2 o-rings.

Fixing torque (M5) = 6 Nm

Arrangement body - EDM06A

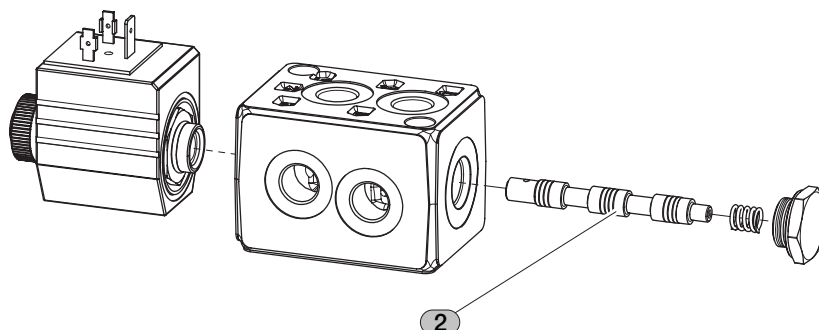


Arrangement body - EDS06A



ASSEMBLY SPOOL

| Product | 1 | 2 | 3 | 4 |
|-------------|-------------|-------|---------|---------|
| E D M 0 6 A | B D 6 1 1 B | S 6 1 | A R 2 1 | R D 0 5 |

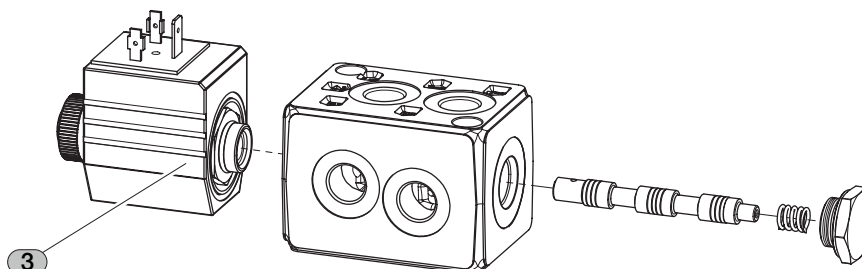


Each diverter contains a spool; each spool is compatible with all solenoid actuation type and all return action type. The spools of the diverters can be mounted in two modality: **STANDARD circuit** and **REVERSE circuit**. If you wish to change the mounting modality, swap the position of the solenoid actuation kit and return action kit; the position of the body does not change.

| CODE | DESCRIPTION | SYMBOL |
|-------------|---|--------|
| S61 | Spool 2 positions with ports CLOSED in transit position - STANDARD | |
| S62 | Spool 2 positions with ports CONNECTED in transit position - STANDARD | |
| S61R | Spool 2 positions with ports CLOSED in transit position - REVERSE | |
| S62R | Spool 2 positions with ports CONNECTED in transit position - REVERSE | |
| S63 | Spool 2 positions with ports CONNECTED in transit position - STANDARD only external drain | |

SOLENOID ACTUATION TYPE

| Product | 1 | 2 | 3 | 4 |
|-------------|-------------|-------|---------|---------|
| E D M 0 6 A | B D 6 1 1 B | S 6 1 | A R 2 1 | R D 0 5 |



Solenoid actuation type is available in 3 configurations; all solenoids are perfectly interchangeable.

- DIN 43650 ISO 4400

- DEUTSCH DT04

- AMP JUNIOR Class H

For different applications or connector type, contact our Sales Office.

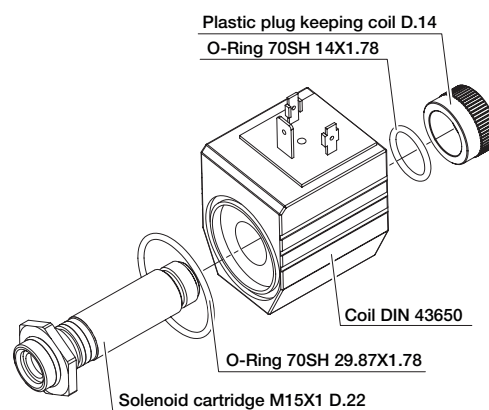
| CODE | DESCRIPTION | CONNECTOR TYPE | INSULATION CLASS |
|-------------|--|--------------------|------------------|
| AR21 | Solenoid kit (12 VDC - Class H) | DIN 43650 ISO 4400 | IP65 |
| AR22 | Solenoid kit (24 VDC - Class H) | DIN 43650 ISO 4400 | IP65 |
| AR28 | Solenoid kit (12 VDC - Class H) | DEUTSCH DT04-2P-L | IP69 |
| AR29 | Solenoid kit (24 VDC - Class H) | DEUTSCH DT04-2P-L | IP69 |
| AR30 | Solenoid kit (12 VDC - Class H) | AMP JUNIOR | IP65 |
| AR31 | Solenoid kit (24 VDC - Class H) | AMP JUNIOR | IP65 |
| AR32 | Solenoid kit (12 VDC - Class H) with override knob | DIN 43650 ISO 4400 | IP65 |
| AR33 | Solenoid kit (24 VDC - Class H) with override knob | DIN 43650 ISO 4400 | IP65 |
| AR34 | Solenoid kit (12 VDC - Class H) with override knob | DEUTSCH DT04-2P-L | IP69 |
| AR35 | Solenoid kit (24 VDC - Class H) with override knob | DEUTSCH DT04-2P-L | IP69 |
| AR36 | Solenoid kit (12 VDC - Class H) with override knob | AMP JUNIOR | IP65 |
| AR37 | Solenoid kit (24 VDC - Class H) with override knob | AMP JUNIOR | IP65 |
| AR27 | Actuation kit without coil (M15X1) | | |


Note:

Solenoid actuation kit is equipped with solenoid cartridge, coil, o-rings and plastic plug keeping coil (see drawing on the right).

TECHNICAL SPECIFICATIONS

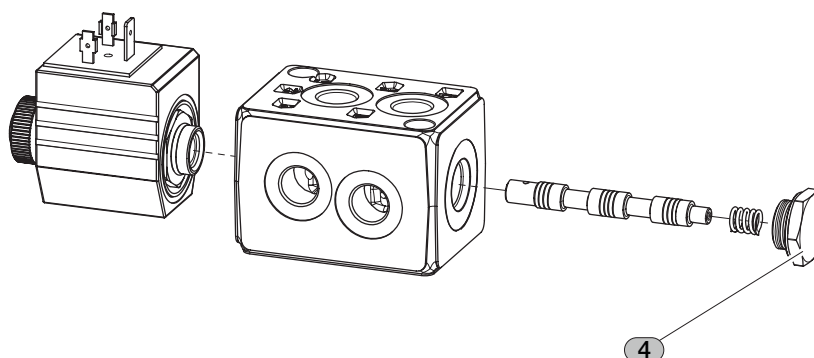
| voltage | power | resistance | current |
|---------|-------|------------|---------|
| 12 VDC | 26 W | 5.53 Ohm | 2.17 A |
| 24 VDC | 26 W | 22.1 Ohm | 1.08 A |

EXAMPLE OF AR21 KIT

PNEUMATIC ACTUATION TYPE

| CODE | DESCRIPTION | NOTE |
|-------------|-----------------------------------|---|
| AR38 | Pneumatic actuation (G 1/4) | With external drain Pilot Pressure = min. 5 bar (7p psi) |
| AR39 | Pneumatic actuation (7/16-20 UNF) | With internal drain Pilot Pressure = 1/10 of working pressure |

RETURN ACTION TYPE

| Product | 1 | 2 | 3 | 4 |
|-------------|-------------|-------|---------|---------|
| E D M 0 8 A | B D 6 1 2 S | S 6 2 | A R 0 1 | R D 0 1 |



Each diverter can be set up in two configurations:

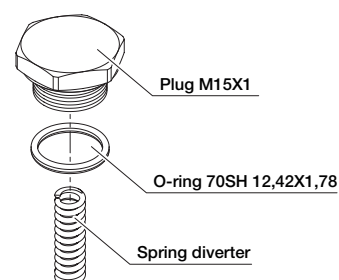
- Internal drain
- External drain

The transformation from one circuit to another can be done by replacing the return action plug kit. For different applications, contact our Sales Office.

| CODE | DESCRIPTION | DRAWING | SYMBOL |
|------|--|---------|--------|
| RD05 | Plug kit INTERNAL drain | | |
| RD06 | Plug kit EXTERNAL drain (Port G 1/4) <i>Only for arrangement body with BSP port (BD611B)</i> | | |
| RD07 | Plug kit EXTERNAL drain (Port 7/16-20 UNF SAE4) <i>Only for arrangement body with SAE port (BD611S)</i> | | |

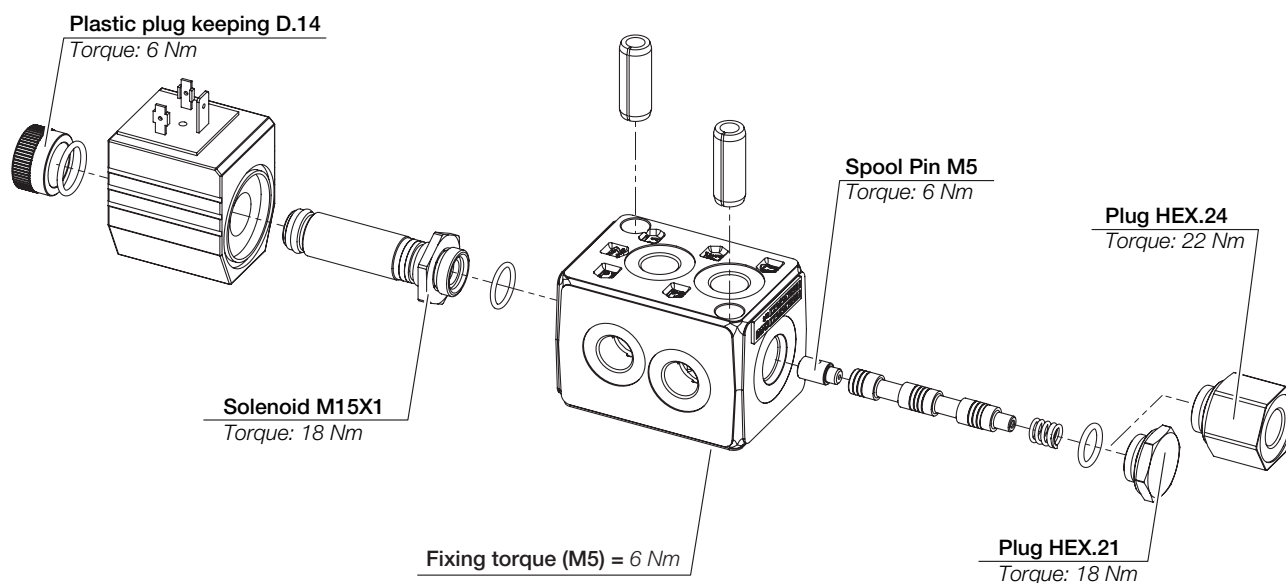
**Note:**

Return action plug kit is equipped with plug, o-ring and spring (see following drawing).

EXAMPLE OF RD05

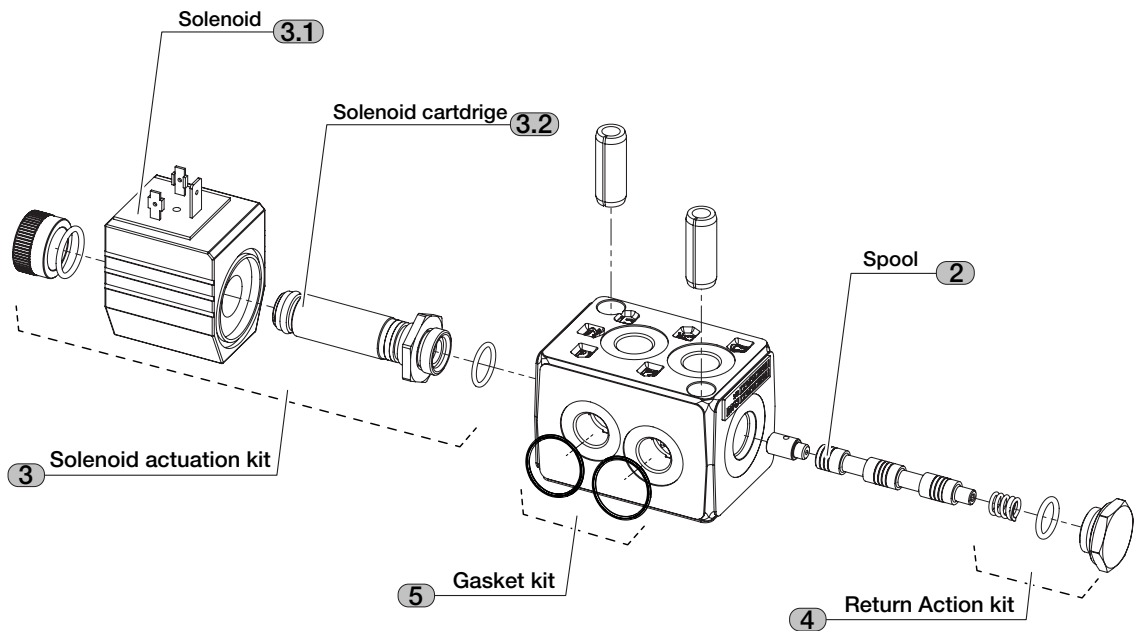
INSTALLATION AND MAINTENANCE

The following drawing represents a complete assembly. The example shown is a monoblock diverter EDM06A and the main tightening torques are shown.

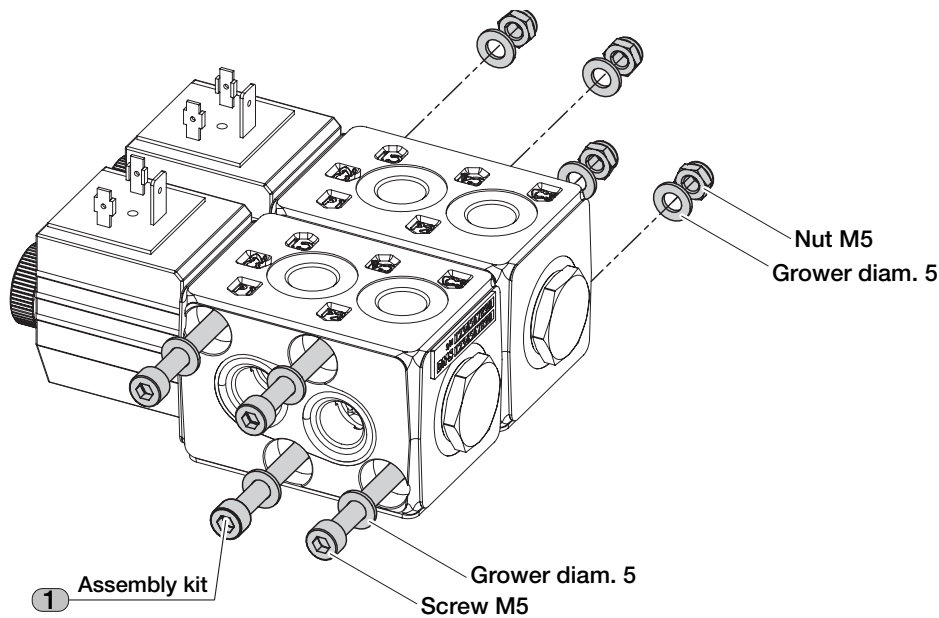


SPARE PARTS LIST

The following drawing represents a complete assembly. The example shown is a monoblock diverter EDM06A with solenoid actuation kit and return action kit without drain.



All stackable diverters include an assembly section kit. Each assembly section is composed by 4 screws, 8 growers and 4 nuts. Screw's lenght depends on the number of sections.



| REFERENCE | CATALOGUE CODE | ORDER CODE | DESCRIPTION | NOTE |
|-----------|----------------|------------|----------------------------|---|
| 1 | N2 | A01010165 | Assembly kit for 2 section | Each Assembly kit contains 4 screws, 8 growers and 4 nuts |



| REFERENCE | CATALOGUE CODE | ORDER CODE | DESCRIPTION | NOTE |
|-----------|----------------|------------------|---|---------------------|
| 2 | S61 | A01150177 | 2 positions with ports CLOSED in transit position - STANDARD | |
| | S62 | A01150180 | 2 positions with ports CONNECTED in transit position - STANDARD | |
| | S63 | A01150178 | 2 positions with ports CONNECTED in transit position - STANDARD | only external drain |
| 3 | AR21 | A01200022 | Solenoid actuation kit 12 VDC (DIN 43650 ISO 4400) | |
| | AR22 | A01200023 | Solenoid actuation kit 24 VDC (DIN 43650 ISO 4400) | |
| | AR27 | A01200030 | Solenoid actuation WITHOUT COIL | |
| 3.1 | | C04010025 | Solenoid 12 VDC (DIN 43650 ISO 4400) | |
| | | C04010026 | Solenoid 24 VDC (DIN 43650 ISO 4400) | |
| 3.2 | | A02010055 | Solenoid cartridge M15X1 | |

| REFERENCE | CATALOGUE CODE | ORDER CODE | DESCRIPTION | NOTE |
|-----------|----------------|------------------|--|------|
| 4 | RD05 | A02010056 | Plug kit INTERNAL drain (M18X1) | |
| | RD06 | A02010057 | Plug kit EXTERNAL drain (M18X1) 7/16-20 UNF SAE4 | |

NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



engineering beyond imagination

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