



ECS12A

Sectional directional control valve

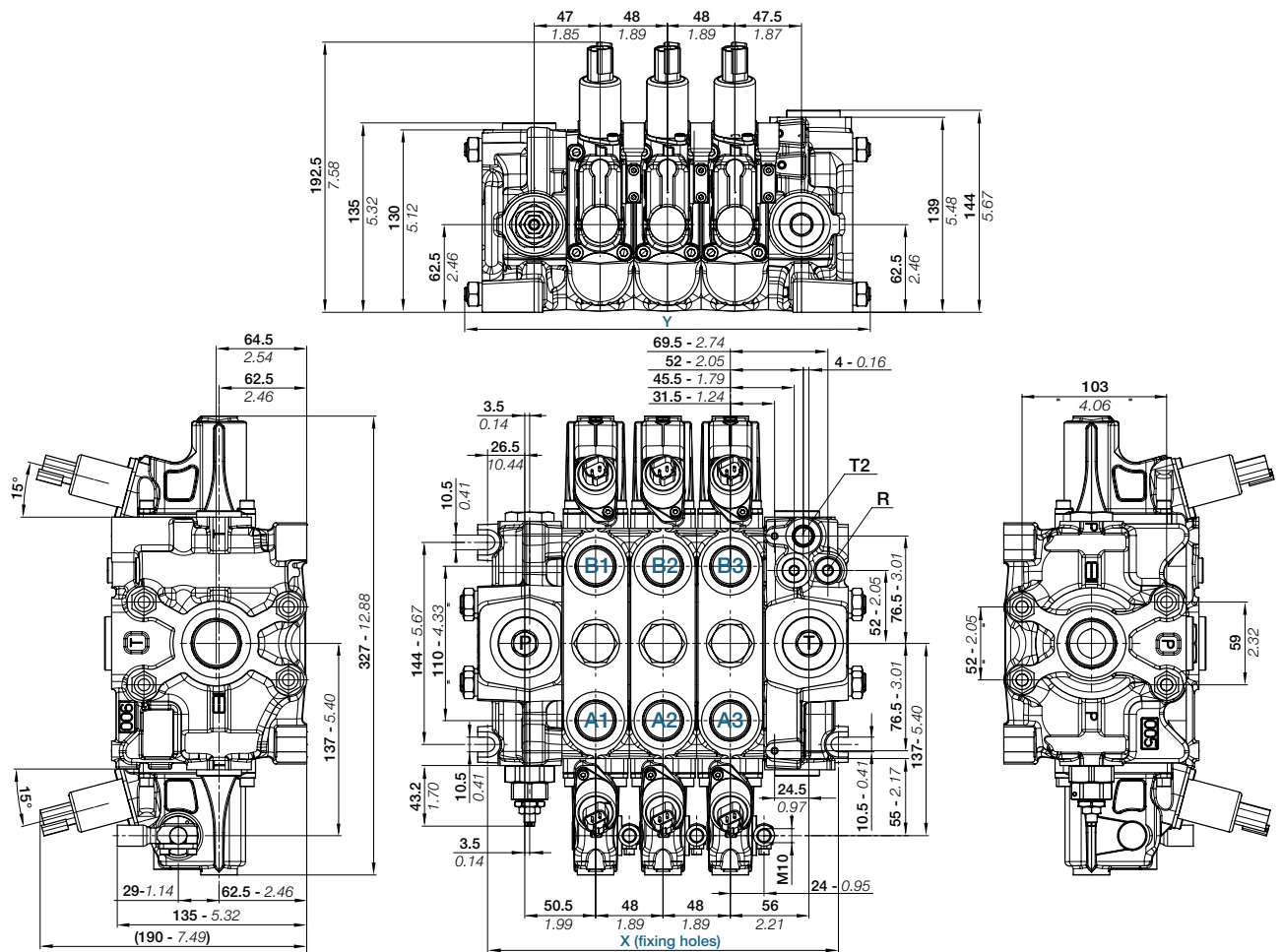
DT.ECS12A.00

FUNCTIONS AND BENEFITS

- Parallel and tandem circuit available.
- Compact directional valve with low pressure losses.
- Interchangeable spools.
- Wide range of auxiliary valves on the ports.
- Availability of manual, pneumatic, hydraulic, and electrohydraulic actuations.

TECHNICAL DATA

Number of sections	1-12
Parallel spool stroke (mm-in)	8 [0.32]
Float spool extra stroke (mm-in)	6 [0.24]
Spool pitch (mm-in)	48 [1.89]
Spool diameter (mm-in)	19 [0.75]
Nominal flow (l/min-GPM)	150 [40]
Operating pressure (bar-psi)	350 [5000]

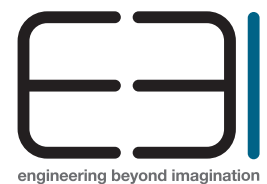


DIMENSIONS

The dimensional drawing represents a ECS12A/3 with electrohydraulic actuation and SAE connections.

TYPE	BSP (ISO 1179-1)	UN-UNF (ISO 11926-1)
INLET - P	G 3/4	1"1/16-12 UNF
Gauge connection	G 1/4	9/16" - 18 UNF
PORTS - A/B	G 3/4	1"1/16-12 UNF
Hydraulic pilot	G 1/4	9/16" - 18 UNF
Pneumatic pilot	G 1/8	NPTF 1/8-27
OUTLET - T/T1	G 1	1"5/16-12 UNF

TYPE	X (mm / in)	Y (mm / in)
ECS12A/1	154 - [6.07]	194 - [7.65]
ECS12A/2	202 - [7.96]	242 - [9.54]
ECS12A/3	250 - [9.85]	290 - [11.43]
ECS12A/4	298 - [11.74]	338 - [13.32]
ECS12A/5	346 - [13.63]	386 - [15.21]
ECS12A/6	394 - [15.52]	434 - [17.01]
ECS12A/7	442 - [17.41]	482 - [18.99]
ECS12A/8	490 - [19.31]	530 - [20.88]
ECS12A/9	538 - [21.20]	578 - [22.77]
ECS12A/10	586 - [23.09]	626 - [24.66]
ECS12A/11	634 - [24.98]	674 - [26.56]
ECS12A/12	682 - [26.87]	722 - [28.45]



EBI MOTION CONTROLS S.r.l
 Via Andrea Costa 11/2, 40057
 Cadriano, Fraz. di Granarolo
 dell'Emilia (BO)
 Tel. +39 051.0188.800
 Fax 051.701.093
www.ebimc.com
info@ebimc.com

ECS12A

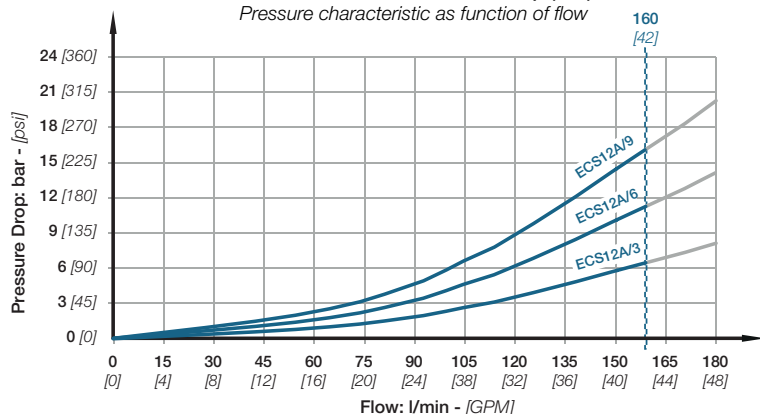
Sectional directional control valve



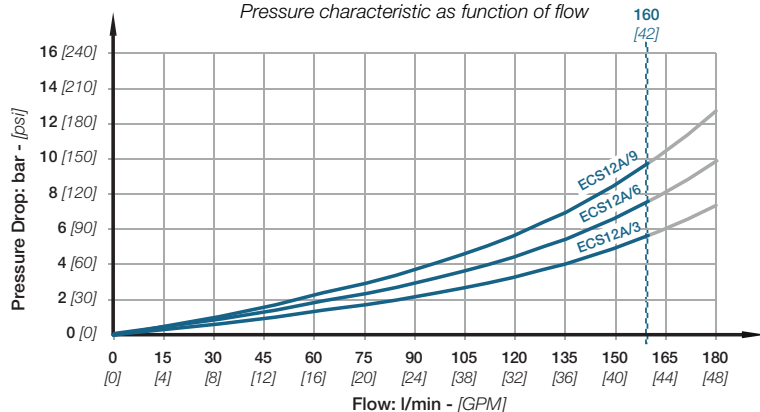
TYPICAL CURVES

All performances are obtained using mineral based hydraulic oil 46 cSt viscosity at 40°C (ISO VG46 viscosity class). All ECS12A go through functional testing at these conditions before shipment.

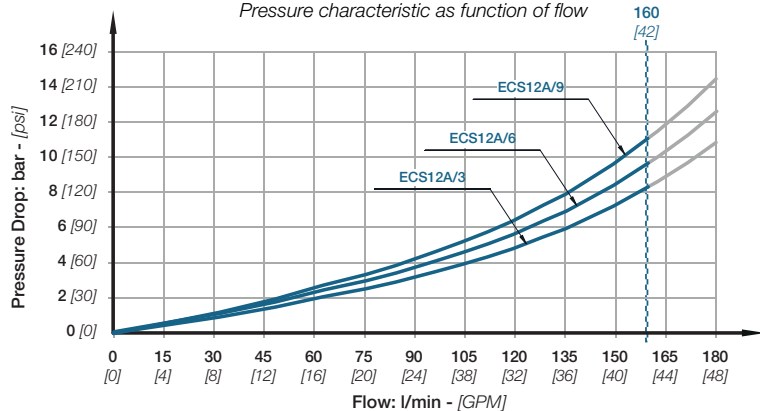
Performance data - Pressure Drop (P-T)
Pressure characteristic as function of flow



Performance data - Pressure Drop (A/B-T)
Pressure characteristic as function of flow



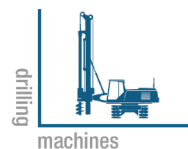
Performance data - Pressure Drop (P-A/B)
Pressure characteristic as function of flow



APPLICATIONS

EBI motion controls provides a broad choice of directional control valves expertly developed and tested to meet different market sectors' needs.

ECS12A are suited for specialized applications for a variety of mobile equipment such as:



OPTIONAL FEATURES

- The mechanical joystick control and the double side actuation are available on request.
- All outlet section ECS12A can be easily transformed from simple T port to HPCO configuration just by installing two conic plugs.
- On request all ECS12A directional control valves by EBI can be delivered painted (RAL 9005 black primer).
- To improve performance and controllability, a full range of hydraulic remote controls (joysticks and foot pedals) is available (see ESJ01A, ESJ02A, ESP02B, ect.)