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FDxx-40, 41, 42 Flow Dividers Now Obsolete; Replace with FDxx-45 Flow Dividers

Overview

The FDxx-40, -41 and -42 screw-in, cartridge style flow dividers have been superseded by the FDxx-45 flow dividers.

The FDxx-45 flow dividers are more versatile, incorporating the features of the FDxx-40, -41 and -42 flow dividers into a single product. With a higher operating pressure of 345 bar (5000 psi), the FDxx-45 flow dividers are also more robust.

By reducing spool-to-cage clearance, HydraForce has improved the flow range of accurate flow division for the FDxx-45 models. Pressed-in stops have been replaced with washers and retaining rings and stronger, heavy-duty spool hooks have been introduced.

Spool timing has also been modified to prevent locking-up in the combining mode, a common flow divider issue.

The FDxx-45 flow dividers provide synchronizing flow in both the dividing and combining modes at bottomed-out conditions in cylinder applications and stalled conditions in motor applications. Inlet ports are larger in diameter to accommodate greater flow. The floating cage design allows high installation torque, which helps to ensure the flow divider stays tight and leak-free in the cavity.

Affected Products

IF YOU ARE USING These Flow Dividers	REPLACE WITH These Flow Dividers
FD10-40	FD50-45
FD10-41	FD50-45
FD10-42	FD50-45
FD12-40	FD52-45
FD12-41	FD52-45
FD16-40	FD56-45
FD16-42	FD56-45



The FDxx-45 Flow Divider (right) is the recommended replacement for the FDxx-40, -41, and -42 flow dividers (left). It has a modified cage with larger ports in the center. The nose of the valve has a more durable tip as well.

There are several models: FD50-45, FD42-45 and FD56-45. The FD50-45 has input flow options ranging from 4-57 lpm (1-15 gpm). The FD52-45 has input flow options ranging from 61-106 lpm (16-28 gpm). The FD56-45 has input flow options from 98-197 lpm (26-52 gpm). As the 16-size valves are the most "abused" in applications by using the valves at higher than specified flow and pressure rate, a more robust "link-type" spool design has been introduced on 16-size valve.

The input flow rates are the maximum allowed flow, and the minimum input flow is 25% of the maximum. Each model has a choice of input flow options.

Performance curves are shown on reverse.

Timing

The final order date for the FDxx-40, 41 and 42 flow dividers will be June 1, 2020. The FDxx-45 flow dividers are the suggested replacement products.

Impact

The FDxx-40, -41 and -42 flow dividers have been removed from the HydraForce website, and on June 1, 2020, will be removed from i-Design and our price list.

For more information . . .

Contact your HydraForce representative for additional information or if you require application assistance.

Hydraforce FD10-40, FD10-41, FD10-43 replace by Hydraforce FD50-45
Hydraforce FD12-40, FD12-41 replace by Hydraforce FD52-45

For detailed information and specifications, visit www.hydraforce.com or contact your local HydraForce representative at www.hydraforce.com/distribs/world.htm

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Size Comparisons

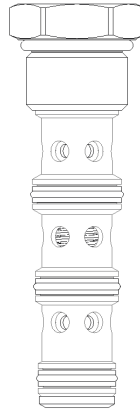
FD10-4x



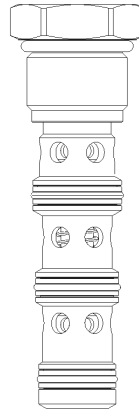
FD50-45



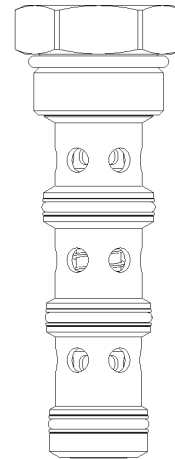
FD12-4x



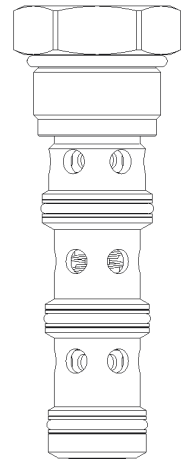
FD52-45



FD16-4x

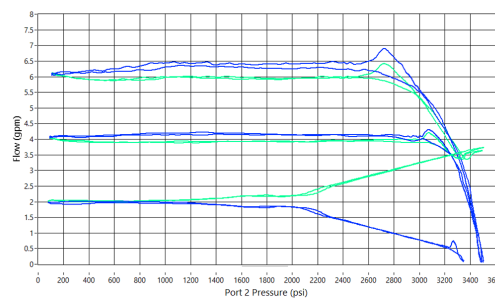


FD56-45

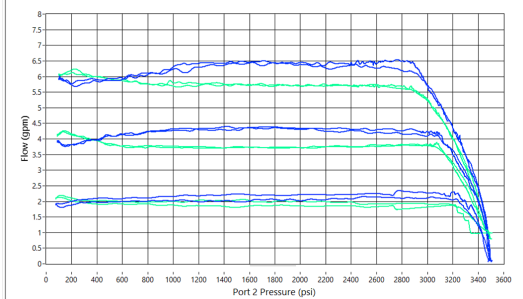


Performance Comparisons

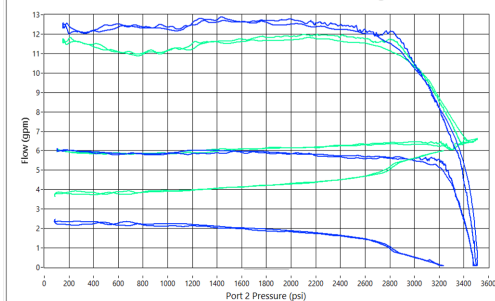
FD10-40 Q4 and Q2 vs P2 (Dividing Mode)



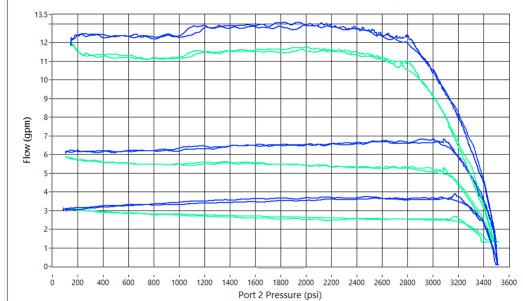
FD50-45 Q4 and Q2 vs P2 (Dividing Mode)



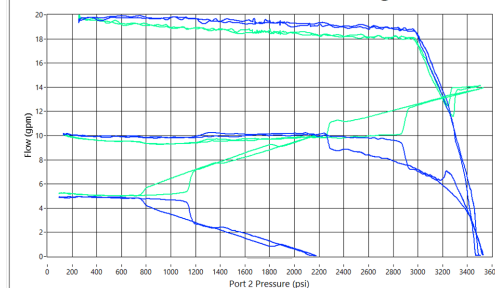
FD12-40 Q4 and Q2 vs P2 (Dividing Mode)



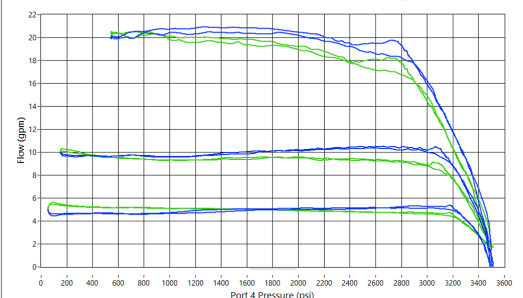
FD52-45 Q4 and Q2 vs P2 (Dividing Mode)



FD16-40 Q4 and Q2 vs P2 (Dividing Mode)



FD56-45 Q4 and Q2 vs P4 (Combining Mode)



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